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The politics of the seaside

The party conference season is always a time for nostalgia — but this year the retrospective mood is stronger than ever. Partly it is the time of year; late summer is always a season of a few regrets. Partly it is the towns in which the political parties as creatures of habit always meet: Brighton, Blackpool, Harrogate, the names themselves suggest a time that is always at least 20 years ago, although by going to Salford the Social Democrats have sent out a new and ambiguous message: half *Hard Times*, half new technology.

For higher education the nostalgia produced by this party conference season has a double intensity. First there is the sharpening sense of loss of a time, now impossibly remote and so impossibly sweet, when higher education was (almost) apolitical. Until just ten years ago the leaders of higher education paid perhaps arrogantly little attention to the turmoil of the political life of the nation. Governments came and went, parties rose and fell, while higher education went on, and up, for ever. The very rhythm of university affairs, the dignified succession of planning quinquennia presided over by a gentle and benign University Grants Committee, did not really engage the much more rapid and emotive pace of political life.

The development of the polytechnics and colleges, once the binary cast had hardened in the mind 1960s, became the detailed business of civil servants, an almost obscure subplot in the larger play of the ebb and flow in relations between central and local government. In both cases the (party) politicians seemed to play little part, except to the extent that they accepted the prevailing context for policy and agreed to become expectant practitioners in its manipulation. So higher education appeared almost unruffled by the crude political passions that won and lost elections.

It was an illusion, of course, but a grand illusion. Higher education has always been an intensely political business and our modern system is the product of a series of deliberate political acts; the first tentative steps towards a state subsidy before the First World War, the creation of the UGC in 1919 (and the expansion of its role in 1946), the investment in technical education in the 1940s and 1950s, the expansion of the universities in the 1960s, the development of the binary system and so on. Yet it was backward rather than frontmost politics: and it was bipartisan politics in the important sense that all Governments between 1945 and 1979 shared similar attitudes to higher education, positive if not always supportive, respectful if not always deferential. Managerialism was almost everything, and ideology almost nothing.

The second component of higher education's mood of nostalgia is one that is commonly shared. It is that the mould of British politics has been broken, although hardly along the lines of fissure envisaged by the Liberals and the Social Democrats. The Labour Party, Britain's have remained united, the right has been an even and pragmatic contest for power. This British experiment

ence was in sharp contrast to that in Italy (and until the 1960s Germany and until the 1970s France) where a united right and a splintered left led to the permanent success of the former, or in Scandinavia where the reverse conditions produced a permanent victory for the left.

Today the future prospect of British politics has been transformed. The left has splintered with the creation of the Social Democratic Party and the endless civil war within the Labour Party; the right has held together despite the exile of Carrington, Pym, Whitelaw (and Prior?). Anything of course can happen in politics and happen very quickly. But the best guess today is that the present Conservative Government and its successors will last until at least the end of the 1980s. When it finally falls, it is more likely to be the result of political exhaustion than of the action of its opponents.

This sombre political outlook, combined with higher education's fall from apolitical grace, may well establish the context in which universities, polytechnics and colleges will have to operate during the rest of the 1980s. That does not necessarily mean that they should prepare for the onslaught of more cuts. The present Government has no strong interest in undermining higher education, any more (or less?) than in scrapping the National Health Service. But it does mean that the twin drives towards efficiency and utilitarianism will probably intensify. Nor will it help to look to Mr Kinnock, or on a rather longer time scale, to Mr Owen and/or Mr Steel, for deliverance; there is no strong evidence that they dissent from these two priorities.

Nostalgia of course is a seductive mood — especially if it is mixed with anger. There are still many people in higher education, particularly perhaps in universities, who deny that the good old days when alternately benign Butler and Keelie Governments let higher education alone (and paid its bills) have gone for ever. They believe that they can be made to return by an effort of rhetorical will. It is this unrealistic spirit that mars the otherwise useful book *The Attack on Higher Education* by Maurice and David Kogan (page 2). By accusing Sir Edward Parkes and his UGC colleagues of appeasement the authors imply that less traumatic but equally feasible policies were available.

Sir Edward Parkes leaves the UGC today to become vice-chancellor of Leeds University. He has had to suffer more abuse than any previous chairmen of the committee, although nothing less could be expected considering the traumatic decisions the UGC has been forced to take. To the Kogans he is an collaborator; in last Sunday's *Observer* the accusation was of "the Kremlinque rigidity of the committee." The view from inside Government is very different. It is of a man and a committee that showed great skill in determining just how much pressure could be applied on ministers without any real damage to the institution. It is to keep the Government's nose out of the details of university affairs.

The UGC did what it could, but damage was still done by the cuts of the winter of 1980/81. That damage is not less because it has not led to the avalanche of closures and redundancies that were gloomily forecast. Instead it is working away silently inwardly, sapping morale and undermining quality. It is this second thesis in the Kogans' book, that the long-term effect of the cuts may be to diminish dramatically the intellectual creativity of the universities, that must be taken very seriously.

The danger signals are already there. The older generation of university teachers who entered the profession before the great Robbins expansion has been lopped off by early retirement. The "new blood" programme has attracted disappointingly small fields of candidates in some cases, perhaps because an academic career is no longer an attractive prospect for the best and the brightest. In any case the scale of the programme is so small that it can hardly begin to have a serious impact on the age structure of university teachers. So universities are now staffed to a much greater extent than two or three years ago by the "baby" generation of teachers recruited in the 1960s, a generation that may find it particularly difficult to adjust to the steady-state and contraction conditions of the 1980s.

Meanwhile back at the seaside no one worries about such questions. Politicians may have lost their former fastidiousness about interfering in the internal affairs of higher education, but they have gained no new consuming interest in universities, polytechnics and colleges. There is apparently no symmetry between interference and interest.

In its present rather masochistic mood higher education may be tempted to blame itself for the politicians' lack of interest and commitment. In fact it may say far more about the state of the nation. The record of history suggests that universities flourish in times of great social change and intellectual excitement, when old customs and values have been successfully challenged and now ones are in vigorous competition. It is in such times that the mind of man is set free.

So it is not surprising that universities flourished from 1560 and 1660 between the Reformation and the scientific revolution, again during the nineteenth century under the dual impact of enlightenment and industrial revolution, and after 1945 when cultural pessimism, rapid scientific and material progress, and a new social revolution came together to produce similar conditions of uncertainty and excitement.

Perhaps the 1980s, as well as being years of political reaction, will be rather predictable and boring, a period when new ideas are frowned upon and social and economic change only reluctantly accepted. Under these conditions there might be less interest in universities, as universities whatever may be the demand for them as centres of applied research and advanced learning. To adapt the AUT's slogan, Britain might need its universities more but want them less.

Campus guide for consumers

The colour magazines of Sunday newspapers are ruled by the great fairs of consumerism — Motor Show, Boat Show, any show. Each one has to be dutifully celebrated in the pages of consumer magazines. Now, a new edition of the *Sunday Times* has been pressed into higher education's service. It is a rather more skilful one-off attempt, have offered a consumer's guide to universities and colleges. It is easy to be dismissed by a cynic as such. Reading claims the lowest incidence of VD in the country. Such a claim to be honest, the *Sunday Times* is a rather more skilful one-off attempt, have offered a consumer's guide to universities and colleges. It is easy to be dismissed by a cynic as such. Reading claims the lowest incidence of VD in the country. Such a claim to be honest, the *Sunday Times* is a rather more skilful one-off attempt, have offered a consumer's guide to universities and colleges. It is easy to be dismissed by a cynic as such. 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SERC to probe grants squeeze

by Jon Turney
Science Correspondent

The Science and Engineering Research Council is worried about the number of grant applications it has turned down and has set up a study group to examine the effect of grant refusals on research groups.

Under the system of assessment set up by the SERC, proposed projects are graded by review committees and those passed in the "alpha" category used to be virtually guaranteed funding. But the proportion of alpha proposals receiving funds has been declining for several years.

In 1981/82, the SERC's science board, which channels most money into universities, was only able to back 87 per cent of alpha proposals. Professor James Cadogan, chairman of the science board, then spoke of his regret that so many applications "so good as to merit award in all normal circumstances" went unsupported.

Since then the situation has been getting worse rapidly. Unpublished figures for 1982/83 show that only 75 per cent of alpha proposals were funded by the science board. As more grant applications are now being received each year, this means that hundreds of groups are making fruitless applications.

The council has now commissioned a study of the problem from a small

group under Sir Jack Lewis of Cambridge University. The group is visiting departments in areas of special concern to the SERC, including physics, chemistry, mathematics and materials science, to find out the consequences of the cash shortage.

The departments have been chosen from statistics already available at the SERC headquarters in Swindon which show which have suffered most.

Both the council and the science board are anxious to maintain university support which is being squeezed by rising costs of central facilities like the synchrotron radiation source at Daresbury. The problem also affects applicants to the engineering board, although not to the same extent.

Ironically, the effects of grant refusal include lack of access to central facilities, as well as gaps in the continuity of major research programmes in university departments and loss of postdoctoral students who cannot afford to wait to do their next piece of work.

The study group is due to report to council by the end of the year, so its conclusions can be considered in time for next year's budget planning. The SERC may use the results to back a case to the Advisory Board for the Research Councils for more money for university support.



Some of the thousands (over 7,000 in a full year) of the British Council new overseas students reporting to the council's reception point at Victoria Station last week. Six hundred arrived during a four-day peak and flight delays of up to 20 hours meant that council staff were on duty round the clock at Victoria and headquarters.

Craft of teaching literacy

Craft lecturers in further education colleges who find that their students have difficulties with literacy and numeracy are being asked by the Adult Literacy and Basic Skills Unit to help them with reading and writing on the spot rather than refer them to a specialist.

A project carried out at Bolton Technical College which resulted in the report "Literacy Skills: Standards and Demands in Further Education" by Peter Stewart looked at the literacy ability of 250 craft students and found that up to 20 per cent of the day release population had serious literacy problems. Most courses attracted some students who experienced reading and writing difficulties and contained a wide spread of ability.

It is likely that as more young people enter colleges on various schemes sponsored by the Manpower Services Commission that lecturers will find themselves becoming more involved in basic skills tuition.

The handbook has been produced by ALBSU which looks at the literacy and numeracy elements of craft courses and suggests ways in which lecturers can help students so as to enable them to complete the college course successfully.

Drawing upon the requirements of particular courses, mostly in construction, horticulture and catering, lecturers should be able to identify common principles which can be applied to other craft courses.

A first glance at the syllabuses of many craft courses may not suggest a great deal of reading or calculation but students still need to be able to show they have understood the course and an ability to retrieve information from books and journals. The presentation of handouts in a clear and readable form by lecturers can help non-fluent readers follow the course more constructively.

ALBSU takes the view that most students who have such difficulties can be helped to achieve the course and to benefit rather than being taken aside for remedial tuition.

The handbook *Teaching Literacy and Numeracy to Craft Students* is available from ALBSU, Kingsbourne House, 220-231, High Holborn, London WC1V 7DA price £1.20 plus postage.

Polyversity merger to include plans for expansion

Plans for a huge expansion of undergraduate higher education in London-derry in the next five years, with a proposed £3m building programme, are likely to be put forward as part of the merger between the New University of Ulster and Ulster Polytechnic.

The plans are being developed by the recently-designated senior management of the new institution, whose last legal hurdle was passed last month when NUU agreed to resign its charter.

They include the presence in Londonderry of all seven of the new institution's faculties - humanities, art and design, science, technology, social and health sciences, education, and business studies - though not necessarily providing every year and specialization of every course, and a consequent need for a large investment in space and equipment.

The plans stem from guarantees given by the new management, the steering group overseeing the merger and the Government, that Magee University College - progressively run down by NUU in recent years - would be the basis of a campus of similar size and status to the existing ones in Belfast and Coleraine.

Mr Nicholas Scott, under-secretary

of state in Northern Ireland and responsible for education, has set up a committee, the Cowan committee, to report on further and higher education in the north west of the province, and has promised to look sympathetically at requests for additional funding.

The Cowan committee is expected, in its report due next month, to call for the setting up of a liaison committee for the new institution and the North West College of Technology, chaired and including representatives of local commercial and industrial interests, to monitor provision and ensure that there is neither duplication nor squeezing out of the college.

In fact the plans for the Londonderry campus include expansion of the current collaboration between the polytechnic and the college, which already teaches the first year of a polytechnic diploma in technology, so that the college's equipment and staff could also be used in degree courses, at least in the earlier years.

Other specific plans are intended to give the Londonderry campus special expertise which would draw students to it in preference to other places: a peace studies unit is envisaged, and, with Government support, a sizeable information technology development.

Sole union rights for AUT

First steps towards establishing the Association of University Teachers as the sole recognized union for academic and academic-related staff at Northern Ireland's new "polyversity" were taken this week.

The AUT signed a deal with the National Association of Teachers in Further and Higher Education establishing the AUT's rights to seek sole recognition from the management of the new institution, being created out of a merger between Ulster Polytechnic and the New University of Ulster.

Transitional arrangements are also covered by the agreement, with Natfhe responsible for the polytechnic membership and the AUT for its members at NUU from January 1 next year until the end of September 1985 when the new institution will be a year old.

After that Natfhe will surrender its interest and its members are expected to join AUT.

Discussions are to take place today between the AUT and Natfhe's great

rival, the Association of Polytechnic Teachers, which has a stronghold at the polytechnic.

The aim is a similar agreement which will permit APT to represent 250 or so members in Ulster until the new institution is a year old when they too will be expected to become members of the AUT.

But the APT is expected to be loath to surrender its claim to recognition, and has recently changed its constitution to admit non-polytechnic members as long as they teach in institutions offering more than 50 per cent advanced further education.

Further talks are to be held with the Association of Scientific, Technical and Managerial Staffs, which has a number of members among academic-related staff at the polytechnic. The AUT is anxious that the union should be involved in the urgent negotiations it wants to hold with the new institution over assimilation of academic-related staff currently on local government pay scales on to university scales.

Awards directory

More than 650 awards open to lecturers in Commonwealth universities are listed in a new directory published this week.

Listed are fellowships, visiting professorships and grants available to university staff wishing to travel to another Commonwealth country to teach, research or make study visits.

BTEC's higher diplomas 'threatened'

by Patricia Santinelli

Proposals to give less financial support to colleges for non-degree students and the possible introduction of two-year degrees have been attacked by the Business and Technician Education Council in its first week of operation.

The BTEC regards both proposals, one from the National Advisory Body and the other from the Council for National Academic Awards, as a threat to its own courses, particularly in the higher diploma field.

Mr John Sellars, the BTEC's chief executive, has written to the NAB objecting to the secretary's decision to give postgraduate and degree students a 1.05 weighting in comparison to 1.00 for non-degree students, when calculating the indicative financial support for each institution.

"Given that the NAB committee had indicated that it was most anxious

to consider and debate the level of weighting for postgraduate and degree students, it would have been prudent to use the existing 1:1 ratio between such students in these preliminary proposals," Mr Sellars said.

He added that this would have been infinitely better than a figure which had not been justified or accepted by either the board or the committee of the NAB.

"I anticipate that the council will request an assurance from the NAB that in future planning exercises, the committee and board will ensure that decisions on parameters which give significant signals to the colleges about the future shape of the system will only be used and published after they have been debated and accepted by NAB," Mr Sellars said.

In a separate letter to Mr Edwin Kerr, chief officer of the CNAA, Mr Sellars has expressed concern about

proposals for two year degrees contained in the paper on *Future Development of CNAA Policies in Undergraduate Level* published in May.

He said that the BTEC would object to any attempt to award degrees on only two years of study of the part-time equivalent.

"Already degrees are gained in the UK based on a shorter period of study than in other countries within the European Community. To diverge still further from such norm could damage the international status of CNAA degrees with considerable consequential injustice to the students," Mr Sellars said.

Mr Sellars added that the BTEC would be concerned if there were a move to make a significant increase in the proportion of young people pursuing mainly general education for two years after school.

He argued that there was a national requirement for many more school-leavers to pursue study which prepared them for work.

"What they and the country need is not more further general education but for them to proceed to well directed vocational study such as characterises courses leading to BTEC awards. Moreover it would be wasteful within scarce resources to be funding what would be little more than a two year extension," Mr Sellars said.

He added that the council would be concerned if young people were let loose on the labour market with an award which might have limited validity as a qualification in its own right. The many who would benefit from shorter, less purely academic study should be on Higher National vocational courses developing their readiness for work.

Napier sparks union concern

Scotland's further education unions fear that Napier College in Edinburgh is trying to circumvent legislation protecting part time staff.

Both the Educational Institute of Scotland and the Scottish Further Education Association have said they are disturbed by a college memo circulated to Napier's heads of department.

It outlines the recent House of Lords ruling that a succession of part time teaching contracts could be considered continuous employment, and states that people employed for less than eight hours a week would not qualify for redundancy or unfair dismissal claims.

"It has therefore been decided that all appointments of temporary part time teaching staff should be restricted to less than eight hours per week in future," the memo continues.

Mr Keir Bloomer, EIS deputy general secretary, said he was appalled by the notion that a person's hours of employment "should be dictated by how to get round the law rather than how to provide a service to students."

But Napier's secretary, Mr R. W. Stevenson, said the memo had been wrongly interpreted. "All we are trying to do is to point out that the law has changed."



Has Fred Gee joined the growing group of Coronation Street refugees and abandoned the Rovers Return? No need for Annie Walker to worry - actor Fred Gee, who plays her ebullient bar manager in the series, was merely taking a sabbatical, courtesy of Salford University Students Union. He is pulling the first pint in a Salford pub opened by students to help their welfare fund. The Welfare Arms is on the fringe of the campus and a nearby residential area.

Budgets based on old numbers

continued from front page

Other papers presented to Monday's meeting show that a higher weighting for degree courses, demanded by the Council for National Academic Awards and others, would make little difference to the division between colleges and polytechnics. In fact, two polytechnics (Preston and Teesside) would lose small amounts if more money was given for degree students.

The weightings for individual programmes which have also attracted criticism, especially from engineers, were also defended. "All we are trying to do is to point out that the law has changed."

The switch of a proportion of funds back towards the polytechnics, which is widely desired within the NAB, is likely to be accommodated to some extent if Sir Keith Joseph announces an increase in the 1984/85 pool, as requested by the NAB committee. An announcement that the DES will find about half the £25m requested may come next week.

But there are bound to be further disagreements on the distribution of students when the NAB board meets in Eastbourne. The NAB's own continuing education group is writing to oppose any erosion in the numbers proposed for part-time enrolments, while the CNAA is still seeking changes in a number of areas. In town planning, for example, the council has criticized the choice of departmental closures at Coventry and Central London polytechnics, the Chelmer Institute and Gloucester College of Arts and Technology.

The switch of a proportion of funds back towards the polytechnics, which is widely desired within the NAB, is likely to be accommodated to some

Labour condemns 'hacking'

The Government's policies of "hacking away" at research in universities and preventing 60,000 students from winning places were roundly condemned at a meeting at the Labour Party conference in Brighton this week.

Mr Geoffrey Robinson, MP for Coventry North West, Labour's spokesman on science and technology, said the effects of university cuts in five years would leave the country without the ability to produce new research ideas.

Mr Tam Dalyell MP for West Lothian, former Labour spokesman on science directed his fire at Sir Keith Joseph, the Secretary of State for Education, describing his policies to cut student places and sack 10,000 university staff at a cost of £300m to £400m as "defiant".

Both were speaking at a fringe meeting organized by the Association of Scientific, Technical, and Managerial Staffs, where the union launched a pamphlet detailing the effects of research and development cuts on British engineering.

The pamphlet, submitted to the House of Lords Select Committee on Science and Technology notes the serious effect of university cuts and urges a "constructive debate" that will lead to maximum employment.

Mr Clive Jenkins, ASTMS general secretary, chairing the meeting, stressed the need to put science policy back on the agenda.

The *Leading Edge*, price £1 from ASTMS, 79 Camden Road, London, NW1 9ES.

Friends in high places will help Sir Douglas

by Paul Flather

Sir Douglas Hague took over as chairman of the Economic and Social Research Council on Monday, promising that his business, Whitehall and Government contacts would be an important asset for the council.

This week Sir Douglas has been learning the inner workings of the council. Senior staff have been explaining to him just what their jobs entail, and he has been studying recent ESRC publications.

He has known both the Prime Minister and Sir Keith Joseph, Secretary of State for Education, since 1968. He has given them advice both in and out of government, and since 1979 he has served in Mrs Thatcher's policy unit, resigning when she came to power.

In an interview with Mrs Thatcher, Sir Douglas shared many ideas with Mrs Thatcher and Sir Keith. But he stressed he



Sir Douglas Hague fully committed

exchange rates in medieval Europe by Dr P. Spufford of Cambridge University. Research supported by the ESRC £203, price £6 plus packaging, from School Government Publishing Company, Derby House, Blithingley Road, Merton Park, Redhill RH1 3DN.

Architecture heads reject student cuts

by Felicity Jones

Heads of architecture schools have challenged the assumption held by the National Advisory Body and the University Grants Committee that student numbers need to be reduced because of large scale underemployment.

They had been invited to a special meeting of the Architects Registration Council (ARCUK) to learn what the transnational architecture group was doing and to formulate a view on the future of architectural education.

The group informed the heads it was aware of the reduction in resources in higher education and of the relative high cost of degree courses in architecture. It had therefore agreed that the continuation of existing levels of entry would need to be justified.

The group has commissioned a survey to gauge the future demand for architects so it can estimate the number of qualified architects in 1990, based on existing numbers and students.

The possible outlook for the construction and allied industries, future patterns of employment for graduates, the ratio of architects to other professionals in the building team and the future of technicians in architecture were also objectives of the survey. Results should be known by the end of November.

During its inquiries the group also decided to consider degree course lengths and the five-year mandatory award.

The group will also examine the provision of part-time courses, the role of continuing professional development and technician level education.

Some of the heads of architecture attacked it for being too obsessed with workforce supply and demand and too little concerned with the quality of architectural education.

Professor Geoffrey Broadbent of Portsmouth Polytechnic and Professor Ken Martin of Liverpool Polytechnic both quoted statistics to show that architecture had one of the best employment records, with estimates of unemployment running at below 5 per cent.



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Poly costs gap narrows

The gap between different polytechnics' unit costs is narrowing, according to the annual expenditure figure produced by the Polytechnic Finance Officers' Group for 1981/82.

Although North-East London Polytechnic still has the highest cost per student, it is less noticeably expensive than in previous years compared with the second and third most expensive - Kingston and Brighton respectively - while Middlesex has dropped out from its usual place in the top five to below Teesside and North Stafford.

It is also expected that the exercise

will lead to general reports on different aspects of YTS as well as case studies of good practice which can be used widely.

MSC proposals to make the six learning opportunities and eight design elements of YTS compulsory for 1984 were being discussed by the Advisory Professional Standards Group today.

The MSC suggestion is that Area Manpower Board discretion to approve schemes that do not meet these particular criteria should be removed and that all schemes starting in 1984 have to contain these elements from the outset.

Other "nuisances" that are included in the proposals for minimum criteria for the schemes are that all induction programmes should make sure that trainees understand the purpose of the schemes and their role in it, and that they are provided with a training programme prior to the start of the scheme.

Confirmation that YTS might be opened up to a wider range of young people came this week from Mr David Young, chairman of the MSC.

Speaking at the Institute of Careers Officers' annual conference in Eastbourne, Mr Young said that they were considering extending the scheme to employed 17-year-olds.

At the same time discussions are taking place between the MSC, DES, FMT and the Confederation of British Industry to see whether teams of inspectors can be allowed to visit on the job schemes in a small number of firms. This will depend entirely on the willingness of employers.

One of the aims of inspecting both off the job and on the job elements of YTS is to see how a true vocational, educational and training scheme can be achieved and how these two aspects can be fully integrated for the future.

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will lead to general reports on different aspects of YTS as well as case studies of good practice which can be used widely.

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Confirmation that YTS might

SERC to probe grants squeeze

by Jon Turney
Science Correspondent

The Science and Engineering Research Council is worried about the number of grant applications it has turned down and has set up a study group to examine the effect of grant refusals on research groups.

Under the system of assessment set up by the SERC, proposed projects are graded by review committees and those passed in the "alpha" category used to be virtually guaranteed funding. But the proportion of alpha proposals receiving funds has been declining for several years.

In 1981/82, the SERC's science board, which channels most money into universities, was only able to back 87 per cent of alpha projects. Professor James Cadogan, chairman of the science board, then spoke of his regret that so many applications "too good to merit award in all normal circumstances" went unsupported.

Since then the situation has been getting worse rapidly. Unpublished figures for 1982/83 show that only 75 per cent of alpha proposals were funded by the science board. As more grant applications are now being received each year, this means that hundreds of groups are making fruitless applications.

The council has now commissioned a study of the problem from a small

group under Sir Jack Lewis of Cambridge University. The group is visiting departments in areas of special concern to the SERC, including physics, chemistry, mathematics and materials science, to find out the consequences of the cash shortage.

The departments have been chosen from statistics already available at the SERC headquarters in Swindon which show which have suffered most.

Both the council and the science board are anxious to maintain university support, which is being squeezed by rising costs of central facilities like the synchrotron radiation source at Daresbury. The problem also affects applicants to the engineering board, although not to the same extent.

Ironically, the effects of grant refusal include lack of access to central facilities, as well as gaps in the continuity of major research programmes in university departments and loss of postdoctoral students who cannot afford to wait to do their next piece of work.

The study group is due to report to council by the end of the year, so its conclusions can be considered in time for next year's budget planning. The SERC may use the results to back a case to the Advisory Board for the Research Councils for more money for university support.



Some of the thousands (over 7,000 in a full year) of the British Council new overseas students reporting to the council's reception point at Victoria Station last week. Six hundred arrived during a four-day peak and flight delays of up to 20 hours meant that council staff were on duty round the clock at Victoria and headquarters.

Craft of teaching literacy

Craft lecturers in further education colleges who find that their students have difficulties with literacy and numeracy are being asked by the Adult Literacy and Basic Skills Unit to help them with reading and writing on the spot rather than refer them to a specialist.

A project carried out at Bolton Technical College which resulted in the report "Literacy Skills: Standards and Demands in Further Education" by Peter Stewart looked at the literacy ability of 1,550 craft students and found that up to 20 per cent of the day release population had serious literacy problems. Most courses attracted some students who experienced reading and writing difficulties and contained a wide spread of ability.

It is likely that as more young people enter colleges on various schemes sponsored by the Manpower Services Commission that lecturers will find themselves becoming more involved in basic skills tuition.

A handbook has been produced by ALBSU which looks at the literacy and numeracy elements of craft courses and suggests ways in which lecturers can help students go as far as to enable them to complete the college course successfully.

Drawing upon the requirements of particular courses, mostly in construction, hairdressing and catering, lecturers should be able to identify common principles which can be applied to other craft courses.

A first glance at the syllabuses of many craft courses may not suggest a great deal of reading or calculation but students will need to be able to show they have understood the course and an ability to retrieve information from books and journals. The presentation of handouts in a clear and readable form by lecturers can help non-fluent readers follow the course more constructively.

ALBSU takes the view that most students who have such difficulties can be helped at part of the course and to their benefit rather than being taken away for remedial tuition.

The handbook *Teaching Literacy and Numeracy to Craft Students* is available from ALBSU, Kingsbourne House, 229-231 High Holborn, London WC1V 7DA price £1.20 plus postage.

Polyversity merger to include plans for expansion

Plans for a huge expansion of undergraduate higher education in London-derry in the next five years, with a proposed £3m building programme, are likely to be put forward as part of the merger between the New University of Ulster and Ulster Polytechnic.

The plans are being developed by the recently-designated senior management of the new institution, whose last legal hurdle was passed last month when NUU agreed to resign its charter.

They include the presence in Londonderry of all seven of the new institution's faculties - humanities, art and design, science, technology, social and health sciences, education, and business studies - though not necessarily providing every year and specialist of every course, and a consequent need for a large investment in space and equipment.

The plans stem from guarantees given by the new management, the steering group overseeing the merger and the Government, that Magee University College - progressively run down by NUU in recent years - would be the basis of a campus of similar size and status to the existing ones in Belfast and Coleraine.

Mr Nicholas Scott, under-secretary,

of state in Northern Ireland and responsible for education, has set up a committee, the Cowan committee, to report on further and higher education in the north west of the province, and has promised to look sympathetically at requests for additional funding.

The Cowan committee is expected, in its report due next month, to call for the setting up of a liaison committee for the new institution and the North West College of Technology, chaired and including representatives of local commercial and industrial interests, to monitor provision and ensure there is neither duplication nor squeezing out of the college.

In fact the plans for the Londonderry campus include expansion of the current collaboration between the polytechnic and the college, which already teaches the first year of a polytechnic diploma in technology, so that the college's equipment and staff could also be used in degree courses at least in the earlier years.

Other specific plans are intended to give the Londonderry campus special expertise which would draw students to it in preference to other places: a peace studies unit is envisaged, and, with Government support, a sizeable information technology development.

Sole union rights for AUT

First steps towards establishing the Association of University Teachers as the sole recognized union for academic and academic-related staff at Northern Ireland's new "polyversity" were taken this week.

The AUT signed a deal with the National Association of Teachers in Further and Higher Education establishing the AUT's rights to seek sole recognition from the management of the new institution, being created out of a merger between Ulster Polytechnic and the New University of Ulster.

Transitional arrangements are also covered by the agreement, with Natfhe responsible for its polytechnic membership and the AUT for its members at NUU from January 1 next year until the end of September 1985 when the new institution will be a year old.

After that Natfhe will surrender its interest and its members are expected to join AUT.

Discussions are to take place today between the AUT and Natfhe's great

Awards directory

More than 650 awards open to lecturers in Commonwealth universities are listed in a new directory published this week.

Listed are fellowships, visiting professorships and grants available to university staff wishing to travel to another Commonwealth country to research, research or make study visits.

BTEC's higher diplomas 'threatened'

by Patricia Santinelli

Proposals to give less financial support to colleges for non-degree students and the possible introduction of two-year degrees have been attacked by the Business and Technician Education Council in its first week of operation.

The BTEC regards both proposals, one from the National Advisory Body and the other from the Council for National Academic Awards, as a threat to its own courses, particularly in the higher diploma field.

Mr John Sellars, the BTEC's chief executive, has written to the NAB objecting to the secretary's decision to give postgraduate and degree students a 1.05 weighting in comparison to 1.00 for non-degree students, when calculating the indicative financial support for each institution.

"Given that the NAB committee had indicated that it was most anxious

to consider and debate the level of weighting for postgraduate and degree students, it would have been prudent to use the existing 1:1 ratio between such students in these preliminary proposals," Mr Sellars said.

He added that this would have been infinitely better than a figure which had not been justified or accepted by either the board or the committee of the NAB.

"I anticipate that the council will request an assurance from the NAB that in future planning exercises, the committee and board will ensure that decisions on parameters which give significant signals to the colleges about the future shape of the system will only be used and published after they have been debated and accepted by NAB," Mr Sellars said.

In a separate letter to Mr Edwin Kerr, chief officer of the CNA, Mr Sellars has expressed concern about

proposals for two year degrees contained in the paper on *Future Undergraduate Level* published in May.

He said that the BTEC would object to any attempt to award degrees on only two years of study of the part-time equivalent.

"Already degrees are gained in the UK based on a shorter period of study than in other countries within the European Community. To diverge still further from such norm could damage the international status of CNA degrees with considerable consequential injustice to the students," Mr Sellars said.

Mr Sellars added that the BTEC would be concerned if there were a move to make a significant increase in the proportion of young people pursuing mainly general education for two years after school.

He argued that there was a national requirement for many more school-leavers to pursue study which prepared them for work.

"What they and the country need is not more further general education but for them to proceed to well directed vocational study such as characterises courses leading to BTEC awards. Moreover it would be wasteful within scarce resources to be funding what would be little more than a two year extension," Mr Sellars said.

He added that the council would be concerned if young people were let loose on the labour market with an award which might have limited validity as a qualification in its own right. The many who would benefit from shorter, less purely academic study should be on Higher National vocational courses developing their readiness for work.

Napier sparks union concern

Scotland's further education unions fear that Napier College in Edinburgh is trying to circumvent legislation protecting part time staff.

Both the Educational Institute of Scotland and the Scottish Further Education Association have said they are disturbed by a college memo circulated to Napier's heads of department.

It outlines the recent House of Lords ruling that a succession of part time teaching contracts could be considered continuous employment, and states that people employed for less than eight hours a week would not qualify for redundancy or unfair dismissal claims.

"It has therefore been decided that all appointments of temporary part time teaching staff should be restricted to less than eight hours per week in future," the memo continued. "There is neither duplication nor squeezing out of the college."

Mr Keir Bloomer, EIS deputy general secretary, said he was appalled by the notion that a person's hours of employment "should be dictated by how to get round the law rather than how to provide a service to students."

But Napier's secretary, Mr R. W. Stevenson, said the memo had been wrongly interpreted. "All we are trying to do is to point out that the law has changed."



Has Fred Gee joined the growing queue of Coronation Street refugees and abandoned the Rovers Return? No need for Annie Walker to worry - actor Fred Gee, who plays her ebullient bar manager in the series, was merely taking a sabbatical, courtesy of Salford University Students Union. He is pulling the first pint in Salford pub opened by students to swell their welfare fund. The Wandless Arms is on the fringe of the campus and a nearby residential area.

Budgets based on old numbers

continued from front page

Other papers presented to Monday's meeting show that a higher weighting for degree courses, demanded by the Council for National Academic Awards and others, would make little difference to the division between colleges and polytechnics. In fact, two polytechnics (Preston and Teesside) would lose small amounts if more money was given for degree students.

The weightings for individual programmes which have also attracted criticism, especially from engineers, were also defended by the group, which will propose no change to the board.

The switch of a proportion of funds back towards the polytechnics, which is widely desired within the NAB, is likely to be accommodated to some extent if Sir Keith Joseph announces an increase in the 1984/85 pool, as requested by the NAB committee. An announcement that the DES will find about half the £25m requested may come next week.

But there are bound to be further disagreements on the distribution of students when the NAB board meets in Eastbourne. The NAB's own continuing education group is writing to oppose any erosion in the numbers proposed for part-time enrolments, while the CNA is still seeking changes in a number of areas. In town planning, for example, the council has criticized the choice of departmental courses at Coventry and Central London polytechnics, the Chelmer Institute and Gloucester College of Arts and Technology.

Further talks are to be held with the Association of Scientific, Technical and Managerial Staffs, which has a number of members among academic related staff at the polytechnic. The AUT is anxious that the union should be involved in the urgent negotiations over assimilation of academic related staff currently on local government pay scales on to university scales.

Sir Keith refuses to reprieve De La Salle

Governors of De La Salle College, Manchester are to meet next week to decide whether further legal action can be taken over the Secretary of State for Education's refusal to reprieve teacher training there.

Sir Keith Joseph's decision to close down teacher training at the college from next year was announced this week, more than a month later thereby allowing registration to go ahead for 1983.

The announcement has come as a shock to the college and its board of governors composed of Roman Catholic bishops. They had been persuaded that Sir Keith's promise of review of their case would result in the college's survival. Governors had withdrawn their High Court case against Sir Keith on the basis of this review.

In a letter to the Rt Rev Thomas Holland, Bishop of Salford and chairman of the college's board of governors, Sir Keith says that his decision does not imply any failure by the college to meet particular criteria but is based on a conclusion that its contribution to teacher training is no longer essential.

He adds that his decision took into account the needs of the national

teacher training system in the context of a much reduced need for secondary teachers, the creation of sufficiently large teacher training units to use resources effectively and the greater emphasis given to Post Graduate Certificate of Education and university courses for secondary training.

But he points out that he is prepared to consider transitional arrangements which would allow the college to continue to recruit one-year courses during the run-down period to ease its problems. These could include craft design and technology and some PGCE courses.

However, the Rev Brother Wilfred, principal of the college, said he could not see how this would help De La Salle. He added that Sir Keith's explanation about the number of teacher training places nationally was an odd excuse at this stage, since this must have been known before the review.

Sir Keith also acknowledges that the Roman Catholic community has an important part to play in the training of teachers but states that there can be no commitment to a fixed and unchanging share of the public sector initial teacher training intake.

Labour condemns 'hacking'

The Government's policies of "hacking away" at research in universities and preventing 50,000 students from winning places were roundly condemned at a meeting at the Labour Party conference in Brighton this week.

Mr Geoffrey Robinson, MP for Coventry North West, Labour's spokesman on science and technology, said the effects of university cuts in five years would leave the country without the ability to produce new research ideas.

Mr Tam Dalyell MP for West Lothian, former Labour spokesman on science directed his fire at Sir Keith Joseph, the Secretary of State for Education, describing his policies to cut student places and sack 10,000 university staff at a cost of £300m to £400m as "defeat".

Both were speaking at a fringe meeting organized by the Association of Scientific, Technical, and Managerial Staffs, where the union launched a pamphlet detailing the effects of research and development cuts on British engineering.

The pamphlet, based on evidence given by ASTMS to the House of Lords Select Committee on Science and Technology notes the serious effect of university cuts and urges a "constructive debate" that will lead to maximum employment.

Mr Clive Jenkins, ASTMS general secretary, chairing the meeting, stressed the need to put science policy back on the agenda.

The *Leading Edge*, price £1 from ASTMS, 79 Camden Road, London, NW1 9ES.

Friends in high places will help Sir Douglas

by Paul Flather

Sir Douglas Hague took over as chairman of the Economic and Social Research Council on Monday, promising that his business, Whitehall and Government contacts would be an important asset for the council.

This week Sir Douglas has been learning the inner workings of the council. Senior staff have been explaining to him just what their jobs entail, and he has been studying recent ESRC publications.

He has known both the Prime Minister and Sir Keith Joseph, Secretary of State for Education, since 1966. He has given them advice both in and out of government, and since 1979 he has served in Mrs Thatcher's policy unit, resigning when appointed to the ESRC.

In an interview he said he naturally shared many ideas with Mrs Thatcher and Sir Keith. But he stressed he

had never taken a penny of Conservative Party funds and comes to his present job fully committed to promoting British social science research.

"I want the best possible research over the whole field of social sciences done all over the UK on a scale which is appropriate to the needs of the country. If there is not enough money to go round, we must get more from other sources," he declared.

Sir Douglas has been made fully aware of the council's recent troubled history, and the slump in its budget which has declined in real terms by around 30 per cent since 1979.

He stressed also that economics would not in any way come to dominate the council, even though its name has been changed from Social Sciences Research Council. Sir Douglas and Mr Michael Pomeroy, the

retiring chairman, have together approved the new council logo.

"I know I am being seen as another economist's chairman. But a lot of economists would be better economists if they too more notice of what sociologists or psychologists have to offer. I am for a broad multidisciplinary approach."

Sir Douglas's arrival coincides with the publication of the council's annual register of research, supported, during more than 500 grants, and work done in the council units, the Technical Change Centre, and international activities.

Among the projects are studies of residential burglary by Dr D. T. Hecker of University College, Swansea, attempting to identify "vulnerable areas"; a study of how unemployed steel workers in Sheffield have responded to redundancy by a team at Sheffield University; and a study of



Sir Douglas Hague: fully committed

exchange rates in medieval Europe by Dr E. Spafford of Cambridge University. Research supported by the SERC 1983; price £6 plus packaging, from School Government Publishing Company, Darby House, Blenheim Road, Moreham Reghill RH1 3DN.

Architecture heads reject student cuts

by Felicity Jones

Heads of architecture schools have challenged the assumption held by the National Advisory Body and the University Grants Committee that student numbers need to be reduced because of large scale underemployment. They had been invited to a special meeting of the Architects Registration Council (ARCUK) to learn what the transitory architecture group was doing and to formulate a view on the future of architectural education.

The group informed the heads it was aware of the reduction in resources in higher education and of the relative high cost of degree courses in architecture. It had therefore agreed that the continuation of existing levels of entry would need to be justified.

The group has commissioned a survey to gauge the future demand for architects so it can estimate the number of qualified architects in 1991, based on existing numbers and students.

The possible outlook for the construction and allied industries, future patterns of employment for graduates, the ratio of architects to other professionals in the building team and the future of technicians in architecture were also objectives of the survey. Results should be known by the end of November.

During its inquiries the group also decided to consider degree, course lengths and the five-year mandatory award.

The group will also examine the provision of part-time courses, the role of continuing professional development and technician level education. Some of the heads of architecture attacked it for being too obsessed with workforce supply and demand and too little concerned with the quality of architectural education.

Professor Geoffrey Broadbent of Portsmouth Polytechnic and Professor Ken Martin of Liverpool Polytechnic both quoted statistics to show that architecture had one of the best employment records, with estimates of unemployment running at below 5 per cent.



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Poly costs gap narrows

The gap between different polytechnics' unit costs is narrowing, according to the annual expenditure figures produced by the Polytechnic Finance Officers' Group for 1981/82.

Although North East London Polytechnic still has the highest cost per student, it is less noticeably expensive than in previous years compared with the sector and third most expensive - Kingston - has dropped out from its usual place in the top five to below Teesside and North Stafford.

Mr Ken Millis, director of the Department of Education and Science project evaluating such courses and that not only had universities and polytechnics remained disinterested in such students but that the lack of interest was increasing as the supply of candidates with 'orthodox' A-levels expanded.

Yet the success rates of the first

shire as well.

This survey is the first from the finance officers' group to compare the unit costs of the same courses in different institutions, providing only a comparison between so-called "hard" and "soft" subjects plus art and design were used.

Polytechnic Expenditure - Actual 1981/82, The Polytechnic Finance Officers' Group, price £10, available from The Bursar, Brighton Polytechnic, Mithras House, Lewes Road, Brighton BN2 4AT.

Access course students go on waiting and wanting

Admission to most universities and polytechnics is still being denied to students from special access courses, the first Council of Europe workshop of multicultural education held at Keele University was told this week.

Mr Ken Millis, director of the Department of Education and Science project evaluating such courses and that not only had universities and polytechnics remained disinterested in such students but that the lack of interest was increasing as the supply of candidates with 'orthodox' A-levels expanded.

students who go on to higher education via this route was impressive. Some 80 per cent of all access students made satisfactory progress.

A breakdown of such students admitted to higher education institutions in 1982/83 showed that out of an initial intake of 316, 238 passed and some 197 were admitted. Caribbean students who formed the majority of the intake achieved the highest rate of admission compared to British white students. For example, 129 out of 141 who had been admitted compared to 149 out of 173 British white who

Mr Millis also pointed out that the number of admissions to special access courses for 1982/83 had risen by 38 per cent over last year, from a total of 209 to 277. This was in spite of progress in establishing new courses being extremely slow. As in previous years the majority of women outnumbered men.

Of the 197 students admitted, 129 were Caribbean, 129 were British white, 129 were Asian, 129 were African, 129 were Pacific Islander, 129 were Middle Eastern, 129 were South American, 129 were European, 129 were North American, 129 were Australian, 129 were New Zealand, 129 were South African, 129 were Indian, 129 were Pakistani, 129 were Bangladeshi, 129 were Sri Lankan, 129 were Nepalese, 129 were Bhutanese, 129 were Maldivian, 129 were Maltese, 129 were Cypriot, 129 were Turkish, 129 were Greek, 129 were Italian, 129 were Spanish, 129 were Portuguese, 129 were French, 129 were German, 129 were Dutch, 129 were Belgian, 129 were Swiss, 129 were Austrian, 129 were Czech, 129 were Slovak, 129 were Polish, 129 were Hungarian, 129 were Romanian, 129 were Bulgarian, 129 were Yugoslav, 129 were Slovenian, 129 were Croatian, 129 were Serbian, 129 were Montenegrin, 129 were Bosnian, 129 were Herzegovinian, 129 were Macedonian, 129 were Albanian, 129 were Kosovo, 129 were Montenegrin, 129 were Serbian, 129 were Bosnian, 129 were Herzegovinian, 129 were Macedonian, 129 were Albanian, 129 were Kosovo.

Caribbean students were successful. A further breakdown shows that both the percentage rate success of Caribbean men and women is rising. For men this has risen from 63 per cent in 1980/81 to 83 per cent in 1982/83, for women from 75 per cent to 79 per cent.

Only 7 per cent of students were unsuccessful but some 77 per cent left their courses. Among the reasons given for this were financial hardship, obtaining employment, English language difficulties, lack of confidence, and family circumstances.

A study of the overall year shows that in 1982/83 three out of four students who had been admitted to access courses had been successful. Out of the 197 students who

Scots council tries to guide successor

by Olga Wojtas
Scottish Correspondent

The Scottish Council for Tertiary Education, apparently shutting the stable door after the horse has bolted, is to produce guidelines for the body which will replace it in January.

The council has already spent many months producing a lengthy report on the future structure and management of Scottish tertiary education, but has been angered that its proposal for a "McNAB" was rejected by the Government.

The council recommended that a committee on the lines of the National Advisory Body should be set up in Scotland.

But the Scottish Office decided that the new body, the Scottish Tertiary Education Advisory Council (STEAC), should have no control over funding which will remain the preserve of the Scottish Education Department.

There was unanimous opposition to this decision at the latest tertiary council meeting, virtually the only time when there has been unanimity since the council is divided between those who think it should be run by the

regional authorities.

It was agreed that STEAC, which is intended to liaise with NAB and the University Grants Committee, would face problems because of its purely advisory role.

Council members decided to make their displeasure clear to the Secretary of State for Scotland, and to ensure that their opposition was not simply noted by the SED, by hastily producing a set of guidelines for STEAC at the council's final meeting in December. The Scottish Secretary Mr George Younger is expected to attend.

It is not yet clear what these guidelines will be, but since Mr Younger has already firmly squashed all proposals of an independent body with teeth, he is unlikely to recant a fortnight before STEAC is set up.

However, some council members feel that a review of the Scottish tertiary sector is still needed, taking account of developments in vocational education and training over the past two years, and also including the Scottish universities, who were not part of the tertiary council's remit, and they may be proposed as STEAC's first task.

News in Brief New role is announced

The new role of the British Technology Group was given last week by Mr Cecil Parkinson, Secretary of State for Trade and Industry, in a long-awaited formal announcement.

He said the BTG would concentrate on translation of research ideas into commercial products, and especially on technology transfer from public sector laboratories.

The announcement signalled the end of the National Enterprise Board's investment powers, except for technology transfer initiatives, and confirmed that BTG will lose first refusal rights over publicly funded research ideas. However, new guidelines on this topic have yet to be drawn up, and new research grants will be made under the existing conditions for the time being.

AUT decision

The Association of University Teachers is not to leave the Society for Research into Higher Education despite its severe reservations over some aspects of this year's Leverhulme report.

The union's education and development committee decided against taking a decision to disaffiliate when it considered a report on the implications at its last meeting. A central reason was the fear that the association could be cut off from much valuable information needed to determine its own policies on educational issues.

Dancers' aim

Dance teachers from universities, public sector higher education and private colleges have set up a national organization with the main aim of supporting and defending courses in the subject. A delegation has already been to see ministers at the Department of Education and Science.

An interim executive has been elected and a constitution will be drafted at the first annual general meeting of the Standing Conference on Dance in Higher Education next May. The new body can be contacted at the National Resource Centre for Dance, at Surrey University.

ABRC post

Sir John Mason, vice president and treasurer of the Royal Society, has been appointed to the Advisory Board for the Research Councils. Sir John, who has just retired as director-general of the Meteorological Office, fills a vacancy left by the appointment of Sir Peter Swinerton-Dyer as chairman of the University Grants Committee, making Sir Peter an *ex officio* member of an independent member of ABRC.

Sir John's appointment comes at the end of a round of new members intended to broaden the independent membership of the board, which now has 25 members in total.

Cultivating a new audience

The Open University is to venture into farming with a 70-hour course on the health and productivity of dairy cattle.

The course, which starts next year, is aimed at farmers and is a pilot for continuing education courses in agriculture. Another course on pest control is also in the pipeline.

Dr Richard Holmes, the course team chairman, said the dairy cattle course was concerned with preventive husbandry to enable farmers to make more informed judgments. It aims to improve the health and productivity of the cattle, to make more effective use of the veterinary services and to increase understanding of disease prevention.

The course is being produced largely with financial help from the Agricultural Training Board and the assistance of the Royal Veterinary College. It is designed for independent study at home, involving four half-hour BBC television programmes about 70-100 hours study with audio tapes and contact with a local tutor.

One of the problems which faced the course team was the mix of abilities and experience of the people who would be following the course.

A survey was carried out in the initial stages, which produced a reasonable response to the idea. Most interest came from those who worked with the larger cattle herds of 100-150 cattle. Dairy workers in the 25-40 age range were most keen, while farmers of all ages expressed interest. The Agricultural Training Board has organized the tutors, who are all trained vets, written the course materials and provided two experienced training advisers free of charge.

Doubts cast on £300m computer programme

Professor Edward Feigenbaum of Stanford University last week cast doubt on the prospects for Britain's ambitious new programme to advance computer research. He suggested that the £300m project, generally known as the Alvey programme, was spread too widely to hope to compete with the Japanese "Artificial Intelligence" project which is concentrating on computer research. He also suggested that the UK government should fund a "missing generation" of UK researchers working in the US, who were unlikely to return while American industrial and academic salaries remained at two or three times British levels.

Speaking at the SET-Institut fifth generation conference in London, he listed a number of obstacles facing the Alvey programme. First, it seemed something for everyone instead of

Redress teaching balance, says v-c

by Ngauo Crequer

Some teaching at Cambridge University is too specialized and repeats work covered in the schools, Professor F. H. Hinsley, the retiring vice-chancellor said last week.

At the installation ceremony for Sir John Butterfield, his successor, Professor Hinsley said that the general board would soon report on its investigation into the relationship between university and college teaching. He thought it would conclude there was a need for a number of minor improvements, but this was not enough.

"I think it will also find that there is a more general problem calling for further examination," he said. In not a little of our teaching programme a lack of balance has arisen over the years from excessive specialization in some parts of our courses and from undue

regurgitation in other parts of ground which undergraduates have covered at school.

"This problem is not unconnected with those with which, for some time now, the colleges have been wrestling in their on-going review of admissions policies. Like them, it will not be easy to resolve - the more so, because, like admissions to universities, the course and curricula provided by universities are topics which generate facile solutions as well as weighty proposals whenever, as is now to be the case, they properly engage the anxiety of society at large," he said.

He said the same was true of another issue which Cambridge would soon have to discuss - academic tenure. He also revealed that the university was proposing to reduce the retiring age of university officers from 70 to 65.

Professor Hinsley also urged the young "new blood" schemes for attracting talented students should only be continued beyond three years with consultation with the universities.

Although the research council, then, they did not have the same familiarity with the needs of undergraduate teaching, he argued.

"Moreover universities will wish to point out that even within the sciences, which are properly receiving priority, a prolongation of the 'new blood' scheme would reduce their ability to teach what they are best able to teach to the limit of the freedom of their students. These are the most attractive and stimulates them. These are the essence of life and work in a university and they must be preserved."



Lecturers' union loses senior staff

by David Jobbins

Massive changes at the London headquarters of the college lecturers' union are expected after a senior official leaves to take up a new job outside trade unionism.

Mr Keith Scribbins, assistant secretary for salaries and conditions within the National Association of Teachers in Further and Higher Education, is to take a staff tutor at Coombe Lodge further education staff college from January.

His departure marks a further change among officials at the union's London headquarters which began with the death of Mr Tom Jones, assistant secretary for membership and casework, at the end of the annual conference in May.

Mr Mick Farley, assistant secretary for further education, is being seconded to the Manpower Services Commission to monitor the quality of the Youth Training Scheme in the south-east. Although his secondment from the NAFHE is for two years, there is speculation that his absence may be longer.

Mr Scribbins first worked for the NAFHE's predecessor, the Association of Teachers in Technical Institutions. He became an assistant secretary after the 1976 merger with the Association of Teachers in Colleges and Departments of Education.

He was an unsuccessful candidate for the post of general secretary in 1979 and more recently was disappointed when he failed to make the short-list for the post of general secretary of the Association of University Teachers.

"I feel the heyday of the development of NAFHE was in the mid 1970s with the merger. Now it faces almost insurmountable problems, with attacks on both advanced and non-advanced further education. Personally I feel the contribution I have made complete in the present circumstances," he said.

He feels it is now up to the membership of the union to take further the advances in employment law and women's rights which have been its particular interest.

Coombe Lodge will give Mr Scribbins the chance to develop his thinking on the law and non-statutory regulations surrounding further and higher education.

Poly jobless figures rise

The number of students leaving polytechnics only for unemployment increased in 1982, although the rate of increase had slowed down from previous years. Overall 15.7 per cent of polytechnic graduates were left in played six months after they left in 1982, although that figure was sharply into the more marketable sandwich course students 11.1 per cent unemployed and ordinary graduates 17.7 per cent of whom were out of work.

The overall figure compares with 14.7 per cent of polytechnic graduates who were unemployed at the same time the previous year.

"First Destinations of Polytechnic Students Qualifying in 1982" - 26.75 from the Committee of Directors of the Polytechnics, 309 Regent Street, London.

Academic standards 'being put at risk'

by Patricia Santinelli

Academic standards in higher education are being put at risk by the gradual proliferation of subjects and changing teaching methods, Mr Peter Brooke, under-secretary of state for education, told a conference of college validators in Oxford last week.

He told the Council of Validating Universities, which represents 27 institutions which validate colleges of higher education, that acknowledged standards were needed in new subjects.

"One problem is that things are moving - new, more technologically orientated subjects, new teaching methods - so how do you know whether standards are being maintained or not, since you cannot compare like with like" he asked.

He added that this meant looking at teaching quality and ensuring that course approval took into account the need to stretch and develop student's abilities to the full.

"Validation has a central role to play as a quality control mechanism. It is not enough for standards to be high. We must have a nationally respected, objective and visible means of ensuring that they remain high," Mr Brooke said.

Mr Brooke discussed the strengths and weaknesses of the three main methods of validating courses in universities and the public sector and pointed to the continuing need for reassessment, maintenance and improvement of standards so as to win public confidence.

"The common flaw in current

methods of validation is perhaps that the units involved are too dispersed and disaggregated for the results to be reliable," he said.

He added that the current system encouraged originality and diversity and institutions took responsibility for what they did. But it introduced a proliferation of courses and a diversity of methods which might not be helpful. For example, it meant that the results of students from different institutions could not be meaningfully compared. It also meant that student samples were not large enough to permit the effective use of well-known techniques of quality control.

"At the very least the validating system must come to an understanding of the degree of error it has got and develop methods for dealing with it, such as perhaps greater use of common

elements in a range of courses. This is one way of improving the efficiency and reliability of the higher education sector," he said.

He added that while the higher education sector was expanding, emphasis was on provision and approval of new courses. Now the focus must be on adapting existing activities to meet new demands at a time when available resources were no longer expanding.

"NAB (National Advisory Body) will play its part in ensuring that provision is streamlined and relevant. But it is up to the validating bodies to ensure that remaining provision is of high standard, courses are well organized, assessment is reliable, results are comparable and students have the information they need to make informed judgments," Mr Brooke said.

Kingston bid to tighten grip on poly

The borough of Kingston is considering proposals to tighten its already firm hold on the academic and financial affairs of Kingston Polytechnic.

The proposals come from a working group of the borough education committee, which was set up in 1981 to look at the long-term future of the polytechnic. They include the establishment of a local authority management system for the polytechnic, revised articles of government and a smaller governing body, and closer guidance on the polytechnic financial and academic developments.

In a report to Kingston education committee, the working party recommended that local authority control over spending in the polytechnic should move from considering polytechnic estimates to a level of detailed monitoring which ensures that advanced further education allocation does not exceed the allocation/estimate and thus create a burden to be met from rate income.

The working party itself - which largely comprises senior members of the Kingston education committee - should become a permanent monitoring body, taking on work both from the education committee and the polytechnic's board of governors.

A group of officers to meet with polytechnic officers and coordinate information should be established, together with a high level appointment of a borough further and higher education officer who would deal directly with the polytechnic.

Regular meetings of these senior officers, the group's report says, would make budget more systematized, monitor income and expenditure, identify financial policies and academic developments.

The polytechnic should also have an academic development plan. It "must know where it is going, so that change can be relatively easily accommodated" the report says.

Despite the current moves at Kingston towards technology, and the fact that 80 per cent of the courses are already directly commercially or industrially relevant, the report says, this trend should be increased.

Increased coordination with Kingston College of Further Education, and use of the polytechnic's resources outside normal hours and terms should also be pursued, and triennial reports made to the education committee by the director.

Glasgow to press for sports cash

Glasgow University is pressing the University Grants Committee for funds to improve its outdated sports facilities. The university has already highlighted the present inadequacies and severe overcrowding in its restructuring report submitted to the UGC.

Glasgow students are expected to lobby UGC members during their visitation next month.

Dr Peter Radford, director of physical education, said the indoor facilities, designed in the late 1950s, were a generation out of step.

"The university also needed all weather outdoor areas instead of the present few pitches. In the west of Scotland it is very rare to find more than two and a half days a week, you can be playing on a mud field," he said.

First sight

"An Eye for an Eye", one of a series of programmes for the Open University's second level technology course on engineering materials has won the gold plaque at the Chicago International Film Festival. The BBC OU programme is a drama about a firm taken to court (right) over a material used in the manufacture of teddy bears' eyes. A programme for the third level technology course "Last of the liberties" won the silver plaque.



Prisoners keep on learning

Prison education staff interviewed 7,000 inmates in the last academic year who wanted to continue with the education and training they had received inside.

Other figures which confirmed the growth in prison education were offered by Lord Elton, under-secretary of state at the Home Office, at the annual conference of prison education officers at Exeter University last week.

He said that out of 320,000 day and evening classes planned in the last academic year 94 per cent actually took place compared to the 206,000 which ran in 1980.

As the minister responsible for the prison service he was keen to emphasize that the education services had "acquired an assured place in the regimes of prison establishments". He said that it introduced prisoners and

trainees to knowledge, skills and critical thinking and helped people prepare for release when they could reestablish themselves in the community.

One reason why prison education had been examined exclusively by a House of Commons select committee was because of the scale and variety of the service in 120 prisons, he said.

Lord Elton urged education officers to consider carefully the select committee's recommendations on the need to link prisoners and trainees on release with follow-up education and training facilities in the community.

One seventh of the average prison population sat public examinations with a 75 per cent pass rate. All young offenders had engaged in some kind of educational activity while 42 per cent of the adult population had done so on a voluntary basis.

BMA steps up grants call

The British Medical Association intends to step up pressure on the Government to increase clinical medical students' grants to the same level as other undergraduates for their full academic year.

Clinical medical students work 46 weeks a year, but receive a grant calculated at a reduced rate for the extra 16 weeks they work compared with other students. The BMA is now sending a detailed spending questionnaire to student associate members at three medical schools - Glasgow, Birmingham and Charing Cross.

Clinical medical students currently receive £30.45 per week during their additional 16 weeks (£40.85 in London), compared with £53.33 per week for the basic 30 week undergraduate stint.

The philosophy of science is put to the acid test

Who knows how science works, how it progresses, how to choose research goals? For many years the simple answer was the obvious one - scientists. However, there is now a sizable academic community which addresses questions like these from different standpoints. Their answers - as sociologists, political theorists, philosophers or economists - are often different from those given by natural scientists.

This matters because science is as central to the map of academic knowledge as it is to industrial life. It provides a standard to aspire to, authority to be invoked as final arbiter in disputes and fuels technological advance. But does the difference in answers matter to scientists? Do the bands of analysts of science and working scientific researchers have much to say to each other? Two conferences held on successive weekends last month suggest the answer is "not yet".

A number of scientists and policy-makers were invited to address the joint meeting of the Science, Technology and Society Association and the European Association for the Study of Science and Technology at Imperial College, London. But although they

all spoke entertainingly enough, they had little to offer which came near the academic concerns of their audience, who studied these matters as outsiders. Professor Martin Rees put it, he felt "rather like the denizen of some zoo asked to explain to an audience of naturalists about my strange behaviour and motivations". The gulf this implied was not really bridged by his lecture, perceptive though it often was. The impression left was that, for all their disparate backgrounds, training and research areas, members of the science studies community had more in common among themselves than they did with a working scientist.

Significantly, when Rees touched on a long-studied problem in science studies - how to select research projects for a limited budget - he turned not to recent scholarship but to Alvin Weinberg, himself a scientist. Weinberg's suggestions for criteria for choice are 20 years old. More recent work by non-scientists has, it seems, passed the scientists by.

A related gap in awareness appeared at the annual conference of the British Society for the Philosophy of Science at Sussex University, a week

later. This smaller gathering also saw a mixture of speakers, scientists, philosophers and scientists-turned-philosophers. But there was never a sense that all three were profiting from each others' work on a problem of common concern.

The most cogent presentation in the final three sessions came from the biologist Professor John Maynard-Smith of Sussex University. His work on the application of game theory to the evolution of animal behaviour has elaborated a set of extremely elegant ideas about the way strategies in conflict between individuals can be translated into genetic fitness.

At the Imperial College meeting, this apparent lack of interchange between the scientists and their hosts was discussed. Robert Young, the radical Cambridge historian-turned television producer, put the uncharitable view. The absent-minded professor of the 1930s has been replaced by the entrepreneurial, self-seeking scientist whose consciousness of science-society relations is focused on the need for good PR," he judged.

A clue to a different answer came from the cosmologist Professor Bill McRae, who chaired part of the philosophy

Apology to APT expected

by David Jobbins

An apology was expected this week from the chairman of the Inner Education Authority for a letter from one of his colleagues describing a non-TUC polytechnic lecturers' union as "misbegotten and unrepresentative".

Mr Gerry Ross, chairman of the ILEA, is likely to write to the local government ombudsman refuting his finding that the authority was guilty of maladministration when Mr Neil Fletcher, chair of the further and higher education sub-committee, bluntly rebuffed a request from the Association of Polytechnic Teachers for union recognition.

But he is predicted to accept the finding from Mr D. C. M. Yardley, the local government ombudsman for the south east, that an apology is in order over the expressions used. Ironically Mr Ross did not head the authority when Mr Fletcher made his remarks public last year.

An outline letter was drafted at a meeting of the ILEA's staffing committee, chaired by Ms Deirdre Wood, late last week. Then Mr Fletcher said he did not believe he had been offensive to the APT and hoped that views should be expressed frankly and unambiguously. But he felt an apology was appropriate if anything he had said had trampled too heavily on the APT's sensitivity.

In his letter last year Mr Fletcher rejected the offer of informal talks with the APT and stated clearly that the ILEA had no intention of recognizing the union.

He told the ombudsman that the issue was a "political football", calling for a politically-motivated reply. He had not thought it necessary to refer the issue to his committee because it was a political issue and the Labour majority on the ILEA was fundamentally opposed to the APT.

The ombudsman did not agree, describing the letter as "offensive and prejudicial". The question should have been considered by members of the authority with the full facts before them, and an injustice had been caused.

His recommendation was that as the ILEA had in the event recommended against advising the five London polytechnics to recognize the APT, the injustice could be remedied by an apology, but not from Mr Fletcher.

Although the ILEA has no direct control over recognition of the APT by the autonomous governing bodies of its five polytechnics, its APT opposition towards the association will pose problems for infant APT branches started in the higher education colleges following a change of rules widening membership to people teaching at colleges where more than 50 per cent of the work is at advanced level.

At the end of a raffish debate about the meaning of entropy, which ranged over 100 years of definitions and redefinitions, he asked the speakers: "What do you want to do with these results?" A scientist talking, obviously.

In the end, it seems most scientists find their understanding of such issues sufficient for their needs. They may cultivate an interest in history or philosophy in later life, but active researchers do not have the time. The STSA, for its part, needs to find an audience for its members' work elsewhere, among the science policy-makers and power-brokers. This is already happening in a small way with efforts to apply techniques of citation analysis developed by sociologists of science to problems of choice and direction in research policy. That effort now involves the United States National Science Foundation and the French national research centre, as well as a project for the British Advisory Board for the Research Councils.

And the philosophers? My guess is they will continue to enjoy talking among themselves.

Jon Turney

Overseas news Dutch grants plan scrapped

Mr Wim Deetman, the Dutch minister of education, has announced that money is too tight to permit the introduction of the planned new system for financing students. The government had accepted in principle that each student should be entitled to 80 per cent of the unemployment benefits available to 18-year-olds, and in addition to low-interest loans for the payment of fees and other study costs.

One motive for introducing the new system was the recognition that many 18-year-olds are in practice independent of their parents, and that the traditional "parental contribution" to student provision, weighted according to parental income, was not always desirable or even practical.

This scheme was, however, a victim of the latest round of government cost-cutting. In the meantime, becoming increasingly common for students in some forms of further education to study on the quiet, while drawing unemployment benefits.

Fit to study

A group of United States university presidents is seeking a bigger voice within the administration on inter-collegiate athletics in order to ensure better academic performance by college athletes, who are in effect professional athletes in all but name.

At present, they say, inter-collegiate sports administration seems more concerned with negotiating large television contracts than with college athletes who leave college illiterate or with poor reading skills.

"I think everybody would agree there have been a number of problems and abuses in athletics," said Mr Derek Bok, president of Harvard. "We are trying to strengthen the authority of university presidents in these matters."

Exam boycott

All but two of the students of the Faculty of Agriculture of the University of Peradeniya, Sri Lanka, are reported to have boycotted their first year examination.

The boycott, they have told the vice-chancellor, Professor B. L. Panditharatne, is a protest against his not keeping an undertaking to withdraw participation in the report of a special committee which investigated certain incidents last year. They were also protesting against police action last July in forcibly ejecting students from the campus and a proposal to set up a police post on the campus.

Arty fact

A survey made by the Carnegie-Mellon University of Pittsburgh, one of the leading technical universities in the United States, has shown that job offers last May to its current graduates rose 20 per cent for liberal arts graduates and plunged 40 per cent for engineering graduates. (Last May, more than 300 students gained bachelor degrees at Carnegie-Mellon.)

The fact that liberal arts students at Carnegie-Mellon are required to take courses in computer science and statistics may have ensured that the success of Carnegie-Mellon are greater than those of other US universities.

Australia urged to establish technology policy

from Geoff Maslen

MELBOURNE

Australia needs a technology policy with adequate provision for training and retraining workers and management in order to meet the demand for technological labour force (it is to harness the technological developments needed to pull it out of the current depression, according to Sir Bruce Williams, director of Britain's Technical Change Centre).

Giving a lecture at Deakin University, near Melbourne, Sir Bruce said current theories suggested there was a tendency for technical innovations to be hatched together and generate waves of rapid growth. Many economists and economic historians believed there had been four distinct waves of high growth since the 1770s. If there was to be a fifth wave, driven by information technology and biotechnology, and if the fourth wave lasted as long as the first three,

recovery in growth and employment would start to build up from the late 1980s.

But, he said, it seemed clear from the history of technological change that to get a more even rate of technological change, governments had to start encouraging technological innovation that would extend the demand for labour before the boom that accompanied each wave tailed off. Unfortunately, governments had a poor record in spotting technological winners but they could do much more to support strategic research and exploratory development work in what was known as the "enabling technologies".

Sir Bruce said that given the limits of capital markets in Australia, there was a strong case for the creation of specialist agencies which would provide risk capital and management advisory services for small companies. Without a capacity to provide management services, the risks would be too great.

Dublin colleges plan falls victim to cuts

from John Walshe

DUBLIN

Plans for four higher technical colleges in the Dublin area have been quickly put on the long finger pending a Government review.

They join two other major projects which are also being delayed - a new engineering school for University College, Dublin and a dental/medical teaching block for Trinity College, Dublin.

Outside the capital, in the far-flung reaches of the west of Ireland, the small town of Castlebar, Co. Mayo, is wondering if it will ever see the regional technical college promised for it at election time last year. In the midlands, the equally small town of Thurles is having similar doubts about political promises for yet another regional technical college.

Too many political promises in recent years is the reason offered by the present government for the dire state of public finances. The Taoiseach (Prime Minister), Dr Garret Fitzgerald, last month again attacked the kamikaze policies of previous Fianna Fáil administrations.

His coalition government is trying to bring those finances under control with drastic pruning all round, wage restraint and postponement of expensive projects. The aim this year is to bring the government's borrowing requirement down from a very unhealthy 16.5 per cent of the gross national product to a slightly healthier 13.5 per cent, and it looks like succeeding.

The education service has been one



Education minister Gemma Hussey



Premier Dr Garret Fitzgerald

of the sufferers and earlier this year cuts were made in both capital and current provisions.

Tuition fee rises of up to 100 per cent in higher education colleges, the introduction of school bus transport charges for secondary school pupils, a worsening of the pupil teacher ratio and higher fees for taking public examinations were among the measures.

Hopes of some easing in next year's budget were shattered recently by Dr Fitzgerald. He stated bluntly that there was no more leeway in taxation, so further cuts in public expenditure were needed.

Such cuts, of course, are not unique to Ireland but the difference is that the Irish population is still increasing rapidly. The country has the highest percentage of people under 25 - almost half

the total population - and it still has the highest birthrate. The full-time school population is set to reach the 1 million mark in a few years time when the total population will be over 3.5 million.

The education minister, Gemma Hussey, who took the brunt of public criticism over cuts earlier this year, does not want to be cast in the role of scapegoat the next time round.

One way of avoiding this is to attempt to get some form of consensus on priorities for educational spending. To this end she has invited submissions for a forthcoming four-year action programme on education.

The Association of Vocational Education Colleges suggested that many students in technical colleges were "overtaxed" with up to 30 class

hours per week given by highly trained and paid staff. More tutorials and practical sessions conducted by lower grade staff could offer savings, it suggested.

The Confederation of Irish Industries went further and complained of a proliferation of costly options in technical colleges, small final year classes and a lowering of productivity among some teaching staff.

It pointed out that the percentage of Irish young people in higher education was about half the rate for countries like France, the United States, Japan and Denmark.

Although the confederation has been an advocate of reduced public expenditure it called for an increase in higher education numbers, especially in technological and business studies. It suggested that money collected under the one per cent levy on income for youth employment measures should be used for this purpose.

The minister is well aware of the difficulties facing her in the preparation of her action programme and no time out recently to publicly warn of a "crisis situation" facing the economy in providing the necessary places.

Addressing, ironically, a group of chartered accountants she said: "I will call for sacrifices by taxpayers and by those with secure jobs. Needless to say, it will demand a rethinking by those working in education about past increased utilization of personal and physical resources, both of personnel and physical resources. I'm hoping to bring these realities home to the country large."

Tension in El Salvador

by John Bevan

The assassination on September 22 of Manuel de Jesus Baires, a lecturer, has heightened tensions between the government of El Salvador and the National University.

An armed group in civilian clothes attempted to kidnap the lecturer who was shot when he resisted. He died the following day.

The murder of Baires, who was a member of the university's council, comes amidst fears of a new wave of repression against El Salvador's teachers, students and academics who have been a major target of government security forces.

A week before the attack, Hugo Carrillo, a lecturer in the law faculty, and a student leader of the same faculty, Pedro Flores, were kidnapped.

The campus of the University of El Salvador has remained occupied by the military since the army invaded in June 1980 killing over 20 students. Four months later, the rector, Felix Ulfos, was murdered in San Salvador.

Currently, 17,000 students are returning to the university continues to function in rented accommodation: schools, social community building, etc. Even this partial service is under threat as the government is holding back the university's budget.

The government's continued antagonism towards the university was underlined in June with the detention of Ricardo Calderon who has since been elected vice rector.

UN set to test malaria vaccine on humans

by Thomas Land

Human experiments to test the first vaccine against malaria, the "king of diseases" affecting more than 150 million people in Africa, Asia and Latin America, may well take place soon. Plans for the project, which is to follow many years of work through at New York University, suggest that a crucial dispute involving the United Nations over public access to research results has been resolved.

A cautious announcement made in Geneva by the UN Programme for Research and Training in Tropical Diseases, heralding the experiments "in the near future, provided that the necessary financial support becomes available", indicates that detailed plans are already being prepared. There is no shortage of funds for such a project.

The UN's research and training programme is among the financial sponsors of the work carried out at New York University. It is controlled by several global agencies including the World Health Organization (WHO) and the World Bank which are concerned by the disastrous economic effects of tropical diseases in the developing regions.

The reappearance of malaria and the development of new strains of the disease has encouraged intensified scientific research leading to many promising new approaches notably at the Wellcome Research Laboratories at

Beckenham, England, the National University in Canberra, Australia (which officially wiped out malaria in 1981) and at New York University.

Specialists at the WHO think that the New York research breakthrough is worth the Nobel prize. Using genetic manipulation techniques, the scientists have produced a protein carried by the parasite which can stimulate the immune response of the body against the disease. The next steps will involve the large-scale production of a vaccine and the verification of its safety and effectiveness through a long series of carefully monitored and constantly widening trials eventually leading to vast public health projects.

New York University has sought a patent for the discovery and opened negotiations with Genentech, a leading American biotechnology company, about the exclusive commercial exploitation of the vaccine. The WHO has objected on the grounds that its research funds channelled to the New York project through the UN special programme entitled the world organization - as well as all its member nations - to reaping the benefits.

Genentech has hastily retreated from the negotiating table, leaving New York University and the UN to make their peace and find the funds and technology needed for the rest of the project. The announcement by the UN special programme suggests that they have done that.

should be warned by the mistakes in British technology after the war, when there was an excessive pre-occupation with encouraging the "advanced technology" activities of the time - aircraft, atoms and computers.

Technology policy to be effective had to include adequate provision for training and retraining workers by hand and brain, Sir Bruce said. He said the Australian provision was far from adequate. The capacity for industry to develop opportunities depended on investment in research and education and the ability to make adjustments to these to meet new needs.

"In the end a successful technology policy depends on a mixture of attractive opportunities for innovation, a capacity to identify those opportunities and make them passing to them."

Sir Bruce, a former vice-chancellor of the University of Sydney, was at Deakin University to give the first in a series of lectures.

Cashflow problem for Geneva

from Rebecca Irwin

GENEVA

Perhaps the main problem confronting the new rector of the University of Geneva, physicist Marcel Guenin, will be ensuring the flow of funds to this still-growing institution. Guenin, a 46-year old professor at the university and former vice rector, succeeded Jurist Justin Thorens last week.

Of the 26 autonomous Swiss cantons, only eight (Basel, Bern, Fribourg, Geneva, Neuchâtel, St. Gall, Vaud and Zurich) have universities. Because the cantons are completely autonomous in cultural and educational affairs, practically the entire burden of the universities is borne by the cantons themselves.

Each university receives about 15 per cent of its budget from the federal government in Bern, this sum having come down from 20 per cent six years ago. But the federal contribution does not greatly ease the financial strain. University enrolment in Geneva has quadrupled since 1959. Today, 11,000 students are serviced by a teaching staff of 2,000 and an administrative staff of 1,000.

Although the university cannot educate residents from other cantons, they receive little help from their compatriots. Each non-university canton pays 3,000 francs (€25) per student to the university to help share the cost of its students' education. But this aid is purely symbolic: the actual cost of educating a student for one year is about 30,000 francs (€230) and rises as high as 100,000 francs (€3,770) for medical students.

Even this symbolic aid is an enormous political concession from the fiercely independent cantons. Next year, the sum is to rise to 4,000 francs (€1,230) per student per year, but it is politically unrealistic to expect the non-university cantons to contribute anything near the real cost of their residents' education.

Even more burdensome for the universities are the foreign students who study almost free at Swiss universities.

In spite of the financial constraints, it is unlikely the universities will raise tuition fees, even for foreigners as has happened in Britain, according to Christian Reynaud, director of the Student Secretariat of the University of Geneva. He said that the education of foreign students, particularly from the Third World, is one way the Swiss try to help developing countries.

Representatives ease spending limits

From Janet Hook

WASHINGTON

The House of Representatives has made a move to restore some of the money cut from education and other social programmes during the first years of the Reagan administration.

In a series of votes spearheaded by Democratic legislators the House has approved legislation that will lift spending limits for vocational education, authorize new grants for repairing college buildings and increase the budget for grants to college students next year.

The measures approved by the House, where Democrats have a majority, may not all become law because some face an uncertain fate in the Republican-controlled Senate. But even there, legislators seem more inclined to provide increases in federal aid to schools and colleges than in previous years, when President Reagan had a stronger hand in setting the Congressional agenda.

Democrats in the House began their recent legislative initiative by winning approval of a Bill that would raise ceilings on spending imposed on sever-

al education programmes in 1981 as part of an effort to curtail domestic spending. The House vote of the Bill was characterized by its supporters as a repudiation of President Reagan's policies - and as a test of political commitment to improving education.

"If we are truly interested in promoting educational excellence, as the president and many other leaders agree we must, we ought to start by providing adequate funding for the programmes we know are successful," said Representative Carl D. Perkins, a Democrat from Kentucky and chairman of the House education and labour committee. "The entire education community is looking to this vote - and to the president's signature of this bill - as an indicator of who is really concerned about education."

The Bill would authorize a \$1.6 billion expansion in aid to vocational and adult education, support for the arts and humanities, services for handicapped students and several other social welfare programmes.

In action on another bill, the House authorized \$175m (£116m) for college grants for the renovation of campus buildings - provided schools hire un-

employed workers to do the job.

The programme would be set up as part of a \$3.5 billion Bill that would create public service jobs to provide relief for the unemployed. However, the whole jobs Bill may die because it faces stiff opposition in the Republican-controlled Senate.

Democrats were split when the House considered the legislation that mattered most in their effort to turn the tide on education budget cuts. The annual Appropriations Bill in which the Congress provides money for individual education programmes.

The earlier House votes will allow the expansion of education and jobs programmes by setting more generous budget ceilings. But it is in the Appropriations Bill that lawmakers decide whether to finance that expansion by actually providing more money.

The Education Appropriations Bill for 1984 was first drafted this summer under the leadership of a Democratic sub-committee chairman, Representative William Natcher of Kentucky, who tried to keep spending increases within bounds. While proposing some

increases in education programmes - including a four per cent increase in Pell grants, the education department's largest programme of grants for needy college students - Mr Natcher and other members of his sub-committee heard that President Reagan would veto a Bill that was too costly.

As drafted by Mr Natcher's sub-committee, the Appropriations Bill was regarded by some Democratic lawmakers as too tight-fisted - a particularly controversial complaint at a time when many wanted House Democrats to take the lead in boosting education spending.

Responding to those criticisms, the House voted 302 to 111 to add \$300m (£200m) for education programmes before approving the Appropriations Bill. The amendment included an additional \$116m (£72m) for student financial aid - which would allow the Pell grant budget to increase by \$2.6 billion in 1984.

The increase may have satisfied some disgruntled Democrats, but Republican critics contended it was irresponsible to increase spending at a time when the federal budget deficit was expected to reach \$200 billion.

Kashmiri students detained

from Hasan Akhtar

ISLAMABAD

The district magistrate of the southern Karachi district has ordered the 30-day detention of 25 students belonging to the Kashmiri National Students' Federation.

The students were detained under the maintenance of public order ordinance after staging a demonstration to press for admission to Karachi University which is suffering from pressure on admissions and a lack of accommodation and funds.

In the middle of last month, when the new academic year began, a group of regional students from the north-west frontier province held the new vice-chancellor of Karachi University, Dr Jamil Jalibi and about 50 teachers and staff hostages for 18 hours. Like the Kashmiri students, the Pakhtoon students had also furnished a list of 50 Pakistan (Pathan) students wanting admission to postgraduate courses at Karachi University.

The Kashmiri students had put up a list of 25 wanting admission. After their arrest, some of the Kashmiri students went on hunger strike in police custody and they were later shifted to jail and detained for 30 days.

Dr Jalibi took over as vice-chancellor for early last month after having been retired prematurely early this year from the income tax service where he had been for 25 years. There appears to be no quick and easy solution out of the heavy pressure for admissions at the university which has been a teaching staff of 2,000 and an administrative staff of 1,000.

An unspecified number of Kashmiri students were offered admission on the intervention of the University Grants Commission, but they have refused to accept it. Similarly the Pakhtoon students did not accept the offer for limited admissions.

The university authorities can ill afford to ignore the demand of the students from Karachi and other parts of Sindh to ensure maximum admissions for local students. At the moment Karachi University has 20,000 applicants for 3,500 available places.

The government planning commission will not provide any new universities in the next five years in the public sector. It is being left to the private sector to meet the growing demand for higher education facilities.

Foreign students are pouring into California, attracted by the burgeoning fields of high technology computer science and engineering.

This state now 25,000 at 25 campuses within the San Francisco Bay area. This number is expected to double within the next few years, a new study sponsored by the World

Polish universities fear loss of independence

Polish universities are facing the new academic year with considerable apprehension about the future of the autonomy and self-governance promised under the 1982 Higher Education Act.

Warsaw academics have submitted two statements to the prime minister, General Jaruzelski, one signed by 25 professors at Warsaw University and the other by the rectors of five of the city's higher education institutions.

Both documents expressed concern that the government's special powers, which replaced martial law, could threaten the independence of the universities.

The special powers allow the government to suspend staff and students and to override the decision of the rector and the academic council in the name of security.

Dr Bronislaw Miskiewicz, the minister of science, higher education and technology, told a press conference in Warsaw that the legislation was basically preventative in nature. It was needed since some higher education establishments had forgotten that the promised self-governance applied only within a legal framework where higher schools were defined as state schools with a socialist character, he said.

The minister stressed however that the academics' statements should be treated with understanding and that the universities' concern for preserving their self-governance should be appreciated.

The Polish authorities have been making considerable efforts to allay the fears of the academic community before the new term commenced. Dr Miskiewicz dismissed rumours that the government's austerity programme would affect the universities' research programmes.

The government also announced

that the 1,329 university lecturers and staff dismissed in recent months had been sacked for inefficiency and incompetence - not for political reasons.

Interviewed by the Communist Party daily *Trybuna Ludu* Dr Eugeniusz Duraczynski, the head of the science and education department of the central committee of the Polish United Workers' Party, claimed that after the sharp ideological struggle in the universities of recent years, a rationalization of attitudes had begun and the influence of hostile anti-socialist groups had diminished.

Nevertheless, new proposals announced in the last few days do seem to threaten the right of universities to determine their student intake. This has long been a battleground between the academics and the ministry - the main point of disagreement being the "bonus points" which young people from proletarian or peasant backgrounds add to their entrance examination marks.

Academics have long been campaigning for a change in this system, which frequently results in the admission of insufficiently prepared candidates and the government has now agreed to rethink the scheme.

Within the last few days it has proposed that in certain departments intending students should first put in a year's practice in the profession of their choice. Since the jobs mentioned - teaching, farming, the veterinarian and forestry services - are among the most unpopular in Poland, this has been seen as a short-term measure to recruit unqualified labour.

The other proposal concerns the opposite end of the popularity spectrum - the medical schools. Unsuccessful candidates who score 85 per cent or more of the lowest "successful" mark in the entrance exam will be guaranteed a place for the following year.

India raises standards

From A.S. Abraham

BOMBAY

The University Grants Commission has asked Indian universities to put into effect a new programme of examination reforms aimed at ensuring minimum standards.

To guarantee that students study the whole syllabus, question-papers will cover all of it, offering choice only within a question. They will not exempt students, as has been the case so

far, from answering all questions in a paper. Because of this exemption, students have been encouraged to leave out large chunks of the syllabus and concentrate only on a few areas.

Annual examinations will be held under the new scheme only after a minimum number of lectures have been given on each subject. Because of widespread and regular student unrest, term schedules are disrupted, leaving courses uncompleted.

Not want to return home.

For the first time Stanford University in Palo Alto has 1,742 overseas students - more than in rival, the University of California at Berkeley, which has 726.

Students come to the Bay area from 159 different countries. They fill the teaching assistant and research positions that American students have left vacant after opting instead for the higher wages offered by industry.

California experiences brain gain

From Charlotte Beyers

PAALO ALTO

Foreign students are pouring into California, attracted by the burgeoning fields of high technology computer science and engineering.

This state now 25,000 at 25 campuses within the San Francisco Bay area. This number is expected to double within the next few years, a new study sponsored by the World

Overseas news Lawyers get just deserts

Lawyers and legal education are returning with conventional forms of justice to the People's Republic of China, whose legal system was shattered during the chaotic 10 years of the cultural revolution.

During that decade, which ended in 1976, there were no practising lawyers in China. Like other intellectuals, they found themselves assigned to other work, usually some kind of manual labour. Together with the existing legal structure, studies of law were abandoned, sharing the disruption suffered throughout all sectors of education.

But the new constitution adopted last year officially restored the legal system, and in post-Mao China there is an urgent need for many times more than the 8,500 full-time lawyers and the 3,500 part-timers who are now employed in this nation of over one thousand million.

As well as for criminal and civil law work, more lawyers are required for drafting and interpreting the multiplicity of new legislation, much of it arising from the country's return to economic stability and its policy of making contracts mostly for trade, with the outside world.

Current legislation just passed or under consideration includes a patents law, a trademark law, a company law, a foreign economic contracts law and one for foreign partnership joint ventures.

Chinese legal education restarted at the end of the 1970s, with the reestablishment of the Ministry of Justice which became responsible for producing sufficient numbers of lawyers, judges, procurators, other legal officials - and law teachers.

Under the Chinese system, law school graduates with two years of practical experience can qualify as lawyers by taking an examination set by their provincial bureau of justice. But a degree in law is not vital; university graduates with three years' work experience in economic or technical fields who have become familiar with the law relating to those fields may also take the qualifying examination.

There are few failures, but standards for acceptance into the profession will tighten when the current drastic shortage of lawyers is eased.

Between 1979 and 1983 a total of about 11,000 Chinese law students enrolled, and about 2,000 graduate each year. There are now law departments in 30 universities and junior colleges, and four institutes of political science and law which are equivalent to law schools in the west.

The newest and largest of these, set up last May, is the China University of Political Science and Law in Peking. Based on the former Peking Institute of Political Science and Law, it consists of an in-service training college and undergraduate and graduate schools.

The university's president, Liu Fuzhi, who is also China's minister of public security, says the primary function of the graduate school will be to train teachers. So far, it has recruited 125 students, who represent four-fifths of the total graduate enrolment of China's four law universities.

The other three institutes are situated at Chongqing in Sichuan province in south-west China; in Shanghai, in the east; and in Xi'an, in the north-west.

As well as the full-time colleges, the authorities are setting up a number of schools and institutes for spare-time and in-service training of legal workers. In the last few years they have trained about 70,000 judicial cadres throughout the country, and are currently training 11,000.

In addition, there are now 5,000 students in China studying law by taking correspondence courses or attending television courses.

With the reintroduction and growth of legal education came the need for textbooks on law. A group of experts under the ministries of justice and education has worked swiftly to compile since 1980 54 textbooks and reference books on the fundamentals of jurisprudence, history of the legal system, criminal law, law of procedures, civil law and international law.

Jane Marshall



FBI takes interest in debt agency

From P.E. Burke

OKLAHOMA

Federal officials are investigating a Tulsa-based debt collection agency that may owe as much as \$1m (£600,000) to universities in at least five states. The money was collected from college graduates who had failed to repay loans that financed their studies.

Loan money comes from the National Direct Students Loans Programme. The loans are made via universities and colleges and the students are obliged on graduating to repay the loans with interest.

Increasing numbers of graduates are not repaying their loans.

On your marks



Getting a place at a university, polytechnic or college this year has been a difficult task. Good grades, personal push and luck have been more important than ever. In the continuing debate on policy the people, the students, are sometimes forgotten. Today *The Times* launches a project to ensure that those students have their say. In 'The Class of '83' *THE* reporters have talked to a score of people about to enter higher education for the first time.

About half have secured places at university, and about half will go to non-university institutions. They come from different parts of the United Kingdom. They have been to different schools, their backgrounds vary and in their subject choices they cover most of the range on offer.

We have asked them what they expect from higher education and why they chose their subject or institution. We shall return to them at intervals to see whether their expectations are realized. We hope to see, through their eyes, what it is like now to be at university, polytechnic or college. We may find out much about them and we hope too to find out more about our higher education system.

EVA LARTEY, 18 of Leyton, East London. Studying dentistry at Manchester University. Left Leyton Senior High School for Girls with four A levels (Bs in physics and chemistry and Cs in biology and mathematics).

Her late father was a doctor from Ghana and her mother a nurse, so some form of medical training was always on the cards. She chose to do four A levels with a degree in medicine in mind, but switched her ambitions to dentistry in anticipation of high entrance requirements.

She chose Manchester University because of the structure of the course and her preference for city life.

Eva expects the course, which lasts four years and one term, to be academically demanding but is confident of enjoying life as a student. She will spend the first year in the Owens Park student village and does not anticipate financial problems on a full grant.



LYNDSAY FERGUS, 18 of Humble, East Lothian. Studying textile design at Camberwell College of Art.

Left school in Edinburgh with four B grade Highers in English, Biology, Economics and Art, then did foundation year at York College of Art and Technology which she found very stimulating.

Her father is an architect, her mother a housewife. Spent a week visiting art colleges and chose Camberwell because it was friendly and had the course she wanted. There is an arrangement with St Martin's College of Art so she can study fashion one day a week.

Lyndsay has an ambition to set up a shop selling printed textiles with a friend.

ANDREW BROWNING, 18, of Tiverton, Devon.

Doing a nautical studies degree at Plymouth Polytechnic. He will do a range of subjects (navigation, naval architecture, hydrography, oceanography) in his first two years and specialize in his third.

Took A levels at Tiverton college of FE (Maths B, Geography C, Physics D) having previously gone to a comprehensive school.

Father is a clerk of works, mother a part-time secretary, neither of them having been to a higher education institution.

Lieutenant-commanders, rather than careers officers advised Andrew who wants to join the Navy as a commissioned officer.



JEAN MENICOL, 18, from Lezley, near Glasgow. Studying English at Trinity College, Oxford.

Went to Lezley Academy, a comprehensive where she gained seven highers, with A passes in English, French, History, maths and modern studies, a B in German and C in music, and three sixth year studies certificates with an A in French and Bs in English and German.

Her father is a journalist, and her mother a general practitioner.

She chose Oxford partly because of its challenge and partly because she can study pure English, whereas a Scottish degree would have included other subjects.

She is unsure what to expect. "You think of *Brideshead Revisited* and dreaming about it, which is probably quite misleading."

"You do need a bit of determination," she admits. "The interviews where they grill you about your exam papers were quite frightening."



JULIE HALLAS, 18 of Pudsey, Yorkshire.

Doing a one-year arts foundation course at Kramer College, Leeds.

Left Orangefield mixed comprehensive school with A levels in 'art' and 'English' literature, both Ds.

Her course attracts no mandatory grant and is the only one Leeds, the local authority, would allow her to do. They will pay her something towards her material, and half her bus fares - a total of about £48. Her parents will give her pocket money.

Her father is a wholesale fruiterer, her mother an ex-stap assistant.

She says A level art prepared her only to pass an exam in drawing, painting and art history, so now she is eager to try out as much as possible before applying to do an art and design degree next year.

She has little time for fine art and artists. "I know many fine artists would condemn me for saying it, but I don't think there's much point to it unless it's got a practical use in society."



ROSALIND THOMSON, 19 of Romford, Essex.

Taking a BEd honours degree in mentally handicapped teaching at Manchester Polytechnic. Her four-year course will include two years of drama.

Left St Edward's Church of England School, Romford, with A levels in English (B), Sociology (C) and History (D). The school wanted her to go to university.

Rosalind wrote to 16 institutions and chose the poly course as it will qualify her to teach either mentally handicapped or in a primary school. She felt a degree in English followed by PGCE would not be so relevant.

Her parents - father a purchasing manager and mother a medical records worker - have not pressured her.

Rosalind's attraction to this field has been partly influenced by her sister, who is mentally handicapped, and she decided to become a teacher after working in special schools and clubs.



MICHAEL DAVIS, 20 from Watford, Herts.

Studying law at Kingston Polytechnic.

Before A levels at Chater School, a comprehensive in Watford, he set himself up with a job in the civil service.

For the past two years, during which he took an A level and re-applied for higher education places, he worked as a clerical assistant at the Office of Fair Trading in central London. Clerical work was not challenging; "it ended up in a 'worthwhile' job."

Father is a foreman and mother an auxiliary nurse, both originally from Jamaica.

Michael wants to be a solicitor. He plans to steer clear of student politics, but is a keen athlete and born player.

He does not drink or smoke, but expects his full grant to run short. "He knows his parents expect a great deal of him."



EMMA JANE WILKINSON, 18 of Billericay, Essex.

Taking a primary BEd in religious studies at Bishop Grosseteste College, Lincolnshire.

Has three A levels (History C, Sociology C and English D) and ten O levels, taken at a comprehensive.

Emma Jane, a committed Christian, chose religious studies at Bishop Grosseteste as a double act of faith - it was on the DES list of closures but specialises in primary work and is small.

Moreover, the college's prospectus was the last and the best to arrive and conveyed an overall friendly atmosphere.

Her head would give her references only if she included Homerton College in her choices.

Her parents did not push her into teaching, but her mother, disabled after a brain operation when Emma Jane was six months old, was formerly a primary school teacher. Her father works for the Performing Rights Society.

PAUL SMOLINSKI, 18 of Newcastle upon Tyne. Reading economics at York University.

Failed maths A level but got a place on the strength of an A in history and a B in economics. He is thought by Walbottle High School, a large comprehensive, to be the first person from one of the Newcastle's tougher estates to go into higher education. His father, a factory worker, and mother, an airport receptionist have been supportive.

Paul will be about £4,000 a year worse off. He took a permanent job in a bank because he felt his A levels would be insufficient for a university and he did not want to go to a polytechnic. The bank offered him sponsorship but he preferred to keep his career options open.

His parents will now have to contribute towards his grant, part of which will go on a hall place. Paul's main motivation was his strong interest in economics and his preference for York was a combination of attraction for the course, the size of the university and its campus setting.



STEPHEN REID, 18, from Ballymoney, Northern Ireland. He is to study business administration at Queen's University, Belfast.

He got a C in physics, B in chemistry and D in mathematics at the 400-strong 90 per cent Catholic school he went to. Stephen only decided at the last moment to plump for university rather than try for store management at a large retail shop where he had a part-time job. He favoured Trinity College, Dublin but was put off when people said it was too big "and you were just a number". Queen's, he thought, would be more friendly.

"I think there will be a sort of independence, cooking for yourself, looking after yourself. It will be more of an experience than just gaining a degree, three years broadening your horizons."

His mother is a kitchen assistant, his father a lorry driver.

His father advised him to get a job because of the economic state of the country, but his mother said he should go to university, and he is now glad he has decided on that course.

"I don't really know what I want to do when I graduate."

For most of the class of '83, student awards will be their first independent income. In London the grant, reduced in line with parental income, is a maximum £1,975 and elsewhere in the UK £1,660. Students living at their parents' home can expect a maximum of £1,275, while those receiving free board and lodging are eligible for up to £680.

Because many details of the grant levels were announced late in the summer, many students face delays in receiving cheques from their local authorities.

KENNETH GEORGE MACLEAN, 18, of Golspie, Sutherland.

Doing a BSc in electronic and electrical engineering at Robert Gordon's Institute of Technology in Aberdeen. Has five highers - As in English, physics and geography, Bs in maths and chemistry, from Golspie High School, the local comprehensive, where he was dux.

His mother is a secondary school teacher and father an insurance agent.

He found advice from teachers and a visiting careers officer helpful and his class was also visited by schools liaison teams from Robert Gordon's and Aberdeen University.

JOANNA COUGHLIN, 18 of Warrington, Cheshire.

Taking a degree in speech therapy at South Glamorgan Institute of Higher Education, Cardiff.

Passed A levels this summer in French (B), English (B), Biology (E) and General Studies (B), taken at a grammar school now turned comprehensive.

Joanna became interested in speech therapy when her grandfather had a stroke and had to re-learn how to talk. She took a closer look at the work of local health service speech therapists and decided she wanted to train for the profession.

Her parents, both teachers, were happy for her to follow her inclination. She is looking forward to the course as the first set of studies she has chosen herself, although she says the timetable looks even busier than the one she followed at school. She hopes to find time to explore the area around Cardiff, preferably on foot, indulging her enthusiasm for fell-walking.

ADRIAN SILAS, 22 from London.

Doing a BA honours degree in film and photographic arts at the Polytechnic of Central London.

Born in London of Portuguese/Spanish Jewish parents from India he took his A levels at the John Lyon School, the day school arm of Harrow. He expected to follow his father into medicine, taking maths, physics, chemistry and biology A levels. But he failed maths and embarked on a false start - a psychology degree at Goldsmith's College.

But his awakened interest in writing and music combined with the highly charged artistic atmosphere at Goldsmith's set him on a different course. Last year was spent writing for student papers and *The Leveller* - mainly film and theatre reviews.

The only qualm about Goldsmith's was that it was classed as a 'science' school when I believe I have artistic tendencies and a strong creative urge. Now I'm going to be doing something creative I feel much more confident.



CATRIONA CORFIELD, 18, from Edinburgh.

Going to Scottish College of Textiles in Galashiels, one of Scotland's 14 central institutions, to take a BSc in textiles with clothing studies. The four year degree, validated by the Council for National Academic Awards, is a sandwich course, with the third year spent in industry.

Attended the Royal High School, the local comprehensive, and gained five highers: an A in food and nutrition, and Bs in maths, chemistry, geography, and fashion and fabric.

Her father is an architect and mother a secretary.

She had a 10-minute interview with a careers officer who advised her to study home economics, but when she failed higher English, she looked for another course and was attracted by the Gala prospectus.

"I don't really know what I want to do when I graduate."



SARAH DUDLEY, 26, from London.

Doing Russian studies at London University School of Slavonic and East European Studies.

Went to six different schools and left at 16 with six O levels. Travelled and worked in a variety of jobs before ending up as a secretary. Took French A level after a part-time evening course. She has a long interest in Soviet literature and last year went on holiday to the Soviet Union.

"I know I may end up as a secretary again. So many graduates I know are secretaries. But now I really want to go to university. I know I am ready for it and I will really benefit. After such a long gap I know it will be very hard to concentrate and write essays."

She is looking forward to getting involved in student life, but also aims to keep up her flat and working in the holidays to boost her full grant.

"Most people will be a lot younger than me so I am not expecting too much. And I want to keep my old friends."



TRACY SIMPSON, 22, from Manchester.

Doing a humanities foundation course with the Open University.

The course is a second crack at higher education following the bilinguist secretary's course she followed after leaving her secondary modern school at 16. "I was under quite a lot of pressure from the school to stay on and go to university, but I didn't want two more years for A levels, then three years doing a degree," she said.

But after several jobs and time spent travelling abroad, she is set on being the first in the family into higher education by following OU studies right through to a degree. She has a full-time job as a secretary and will have to get in around 12 hours of study a week.

Not for her the pleasures of campus life, beyond a compulsory one-week summer school. The course proper starts in the new year, but Tracy is eager to begin.



KIRSTEN TAYLOR-DUNCAN, 19, of Larbert, Stirlingshire.

Doing a four year BA degree in landscape architecture at Edinburgh College of Art, validated by Heriot-Watt University.

Has already had a brush with higher education. Left local comprehensive, Larbert High School, last year with five highers (Bs in English, geography and art, and Cs in chemistry and biology) and went to Napier College in Edinburgh to do a BSc in science with industrial studies. She had difficulty with the course, which included maths and physics, and left after a month. She was given little careers help at school, but sought advice from a sympathetic careers officer outside school after leaving Napier.

"Heriot-Watt is the only Scottish university that does landscape architecture and I didn't want to go to England. It includes horticulture, botany and art, which I'm interested in. I've also joined the British Trust of Conservation Volunteers and there may be some scope for conservation."

"At first I thought it was a silly idea because I did not go to a grammar school and I knew that the teaching was not geared to getting people into university, let alone Oxford and Cambridge. There was no opportunity for extra tuition or for staying on another year to sit the entrance exam."

"I am not sure if it is physics, or maths or chemistry I really want to do and Cambridge gives me time to choose."

He is on the minimum grant and will be relying on his parents for support.



KATE LEONARD, 18, of Andersonstown, Belfast.

Studying law at Balliol College, Oxford.

Left St Genevieve's High School, a Catholic secondary with three A levels - As in English and politics and an E in economics. Took Oxbridge entrance in her fourth term of A levels.

Father is a widower and has been unemployed for eight years. School helped her with the cost of the interview. Kate's English and careers teachers persuaded her to try for Oxbridge and she will be the first such student from her community - a daunting prospect for her.

"I am not sure if it is physics, or maths or chemistry I really want to do and Cambridge gives me time to choose."

He is on the minimum grant and will be relying on his parents for support.



LUCAS TOMIN, 20, originally from Czechoslovakia. Studying history and history of art at Westfield College, London University.

Left St Edward's School, Oxford (1980-82) with 2 Bs and a D in Latin, Greek, and Ancient History.

Lucas is a refugee, the son of Czech dissidents, members of the Charter 77 Human Rights Group, expelled in 1980 after repeated police harassment for trying to run a philosophy seminar in their Prague flat. In two years he mastered English, and passed three A levels.

He decided early that he needed to leave the Oxford environment where his parents first settled, and planned to become a Catholic monk. Then he became very interested in film and theatre.

Between the ages of six and 14 he was a member of the Pioneers, the young Communist Party, but left disillusioned just before his High School examinations.

He is looking forward to student life, particularly opportunities in drama. But he does not expect to be too involved in the college. He is on a full grant, but plans to work part-time as a stagehand whenever possible for the money and for the experience.

PAUL READ, 18, of Hemel Hempstead, originally from Wales. Studying law at North East London Polytechnic.

He wanted to study law at Warwick University but failed to get 12 points. He got a C in English, D in French and O in biology.

He rang round and found a place to do law at the NELP. He liked their computer information retrieval system and liberal course. He wants to be a solicitor.

"There is a lot of mystique about the law which should be removed. I am now glad I am going to a polytechnic, the course looks very good," he said.



BENNY THOMAS, 19 from Windsor, Bucks.

Reading natural sciences at Trinity College, Cambridge. Went to Eton where he got three A levels, two As and a B. Never doubted that he would go to university "but I would not have gone to Cambridge if the course had not been exactly right."

Father is managing director of a major store and mother is a housewife.

Expects it will be hard to adjust. "I am prepared for some shocks. I know I will have to push myself now. It will also be a nice change to have girls around." He is particularly keen on acting, sport, and will keep up his violin.

He had a "year off" when he travelled to the Far East, and the United States. He chose his course because he need not specialize early.

"I am not sure if it is physics, or maths or chemistry I really want to do and Cambridge gives me time to choose."

He is on the minimum grant and will be relying on his parents for support.

He has just left a state comprehensive school "but I've been to every kind of school you could conceive of, prep, grammar and coeducational boarding school."

Both his parents are journalists and he will get the minimum grant. "I had done my homework on the polys beforehand, the majority of them wanted two Cs to do law. One option was to change my subject but I did not want to do higher education just for the sake of it."

"I think I'm very lucky to have got a place at all. Some of my friends, with good grades, have not got in anywhere."

As the Class of '83 starts the new term, we look at other aspects of student life

Playing the NUS power game

by David Jobbins

The rival groups of student politicians vying to establish their power bases in the universities and colleges at the beginning of the new year have their sights firmly fixed on a point some seven months ahead.

The intervening period will be dominated by the knowledge that at the Easter conference National Union of Students president Mr Neil Stewart must step down after two years at the helm of the 1.2 million member organization.

Already the possible contenders are emerging and the battle lines drawn with the big question: can the National Organization of Labour Students not only find the right candidate to retain the presidency but also hang on to its majority on the NUS executive.

Much will depend on the strengths of the political groupings in the colleges, as beginning with the Christmas conference delegations are to be elected by cross campus ballot giving the non-activists a stronger chance to influence the direction NUS takes.

NOLS has espoused cross campus ballots knowing that its success at local level will more than ever depend on the calibre of its candidates and the appeal of its policies.

Neil Stewart takes great pride and claims some credit for the virtual elimination of the extremes of left and right from national student politics. It remains undeniable, however, that NUS's image in the wider world is essentially left-wing, with its expressions of uncompromising opposition to Government educational and economic policies and its support for CND.

The NOLS leadership belongs largely to Clause Four, the party faction based on strict adherence to the party constitution and the supremacy of party conference decisions over political expediency. But the organization is a broad church mirror of the parent party and as Labour party membership is not a prerequisite, it also includes assorted left wingers among its members.

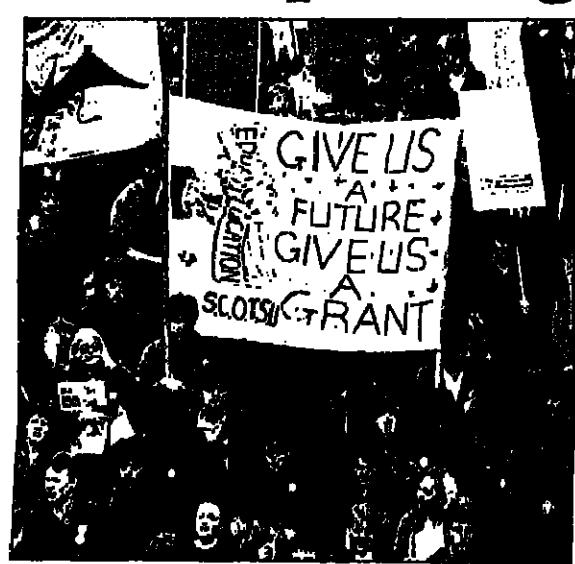
NOLS won the approval of its parent party for firmly resisting the Militant Tendency both among its own membership and in fighting off attempts by the Militant-dominated Labour Party Young Socialists to recruit further education college students.

But the real battle over coming weeks will be for the middle ground, with the Social Democratic Party Students attempting to rise once more from the ashes.

SDPS has been engaged in lengthy talks with both the Union of Liberal Students, with whom they have no formal links, and the Left Alliance, of which ULS is a constituent part. Although a number of SDPS members may have joined the Left Alliance, however, the chances of a formal association are slim, largely because of the presence within the Left Alliance of the Communist Party of Great Britain students. Policy differences particularly in the area of defence also preclude SDPS linking up formally either with the Left Alliance or the ULS, which shares the radicalism of the youth wing of its parent party.

SDPS feels it has great potential among the non-aligned students, and is embarking on a full-scale recruiting drive. It is represented on the NUS national executive, and one of its leaders is on the party executive.

The Liberal students, both within and outside the Left Alliance, remain the most volatile of critics of the NOLS leadership. They argue that NOLS public commitment to pluralism – the reflexion of the wide band of student



Students have been more effective at mobilizing against Government policies than other trade unions. Here they demonstrate earlier this year against the threat to public sector higher education.

opinion in the composition of the union executive – is paper thin, pointing to the voting pattern over the past year.

The vacuum on the left is of crucial concern to the Left Alliance, which existed really only as an umbrella organization for NUS national elections. Since it was largely wiped out by NOLS in 1982, it has attempted to establish local power bases with limited success.

With the SDPS and ULS it remains worried at the state of the left in NUS and has stressed the need to raise the level of debate and provide an alternative to NOLS.

NOLS will be deciding who to run for the presidency in January but already three possibilities are being mentioned. They are Mr Tommy Sheppard, NUS vice president for education and one of Neil Stewart's political opponents within NOLS; Mr Phil Woolas, NUS treasurer; and Mr Bob McClean, chairperson of NUS Scotland.

Sheppard is in his second term as a full time member of the executive and must seek an alternative if he is to remain on the executive next year. But he is far from popular in some quarters of the student movement and was extremely lucky to be re-elected at last Easter's conference with the smallest winning margin in NUS history – a mere three votes.

Phil Woolas is in his first year as a

full timer and is said by some to lack the experience and charisma demanded of an NUS president. One disadvantage to his candidacy is that it would mean NOLS contesting all its seats on the executive simultaneously, leaving open the possibility of losing key people.

Bob McClean is close to Neil Stewart politically and socially. Both share a Scottish background and Stewart was chairperson Scotland before gaining the national presidency. The idea of a Scottish succession becoming established could count against him.

Another Labour Party member who may be standing is Sarah Veale, vice president welfare, who commands a considerable personal following among conference delegates, receiving an enormous vote of confidence last Easter. She was associated with the SSA but left last year and works closely with her NOLS colleagues. Many observers regard her as difficult to stop if she does stand.

The obvious candidate for the Left Alliance to field is Jane Taylor, the union's national secretary, who again has a considerable wealth of support among students and is well regarded by other organizations with which NUS works. She is perhaps the only non-Labour Party candidate who might stand a chance of dislodging NOLS.

SDPS has previously stood presidential candidates more as a flag waving exercise than a real bid for power and it might be persuaded to support Ms Taylor.

But one area she would not openly want to receive support from is the right. The Federation of Conservative Students is now once more acting squarely within NUS and might run a presidential candidate. Equally it might prefer to line up with the opposition to NOLS.

1984 could see the frequently forecast emergency of the Student Ecology Movement whose significance has been often underestimated at local level. And above all cross campus ballots will put power back in the hands of the non-aligned.

NOLS leaders believe that many moderate and apolitical students would prefer to stay that way rather than sign up with SDPS or the Left Alliance.

In the meantime there is the real stuff of student politics to deal with – the student response to the National Advisory Body exercise, grants and housing.

Small but perfectly informed.

The students in our Class of '83 are mostly the lucky ones in their generation of entrants to further and higher education. All but two have grants, even if their parents do have to contribute, unlike the thousands of their contemporaries joining courses which do not enjoy the same official status.

Sources of expert advice and assistance for those who do not qualify for state support tend to be thin on the ground. Students' unions will give what help they can and the college or university concerned may provide strictly limited finance where a hardship fund exists.

Those who want concrete information putting them in touch with the organizations which might help when local authorities have been found wanting have to fall back on a day operation in East London. The Educational Grants Advisory Service was established in 1962 and is now based under the wing of the Family Welfare Association after a period when its future was anything but certain.

The service has only one full-time worker, student adviser Margaret Wisdom, but this year has handled record volume of inquiries, 1,200 written, and almost 1,000 by telephone. Inquiries have steadily increased in the three years since the service rejoined the Family Welfare Association, largely because of the cuts in the number of discretionary awards offered by local authorities and in the number of grants made by research councils. Inflated overseas student fees have also encouraged a new state of activity.

New support by local authorities and particularly by student unions has put the service on a sound footing, to the point where a much-needed expansion of staff may be possible.

The service is primarily intended to help those from disadvantaged groups. Mature students who did not fulfil their potential at school, despite parents seeking qualifications to enable them to support their families, the unemployed, the disabled, refugees, recent immigrants and certain students from overseas are the categories emphasized in its publicity.

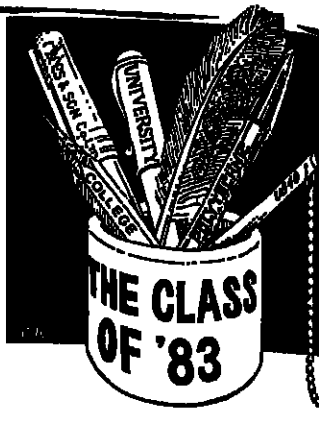
Unless more staff can be afforded, the service has almost reached saturation point even with negligible publicity. With more than 30 student unions now referring cases, as well as a number of local authorities and the National Union of Students, the risk of being swamped by inquiries is a delicate balancing act between enlisting more unions and authorities as members to finance the system and attracting even more pleas for help.

Among those who have been successfully assisted recently include a school-leaver unable to obtain a grant for a dentistry course because she had been supported for an anatomy degree which was a necessary qualification, an African student whose father was made redundant midway through an accountancy degree and an Asian immigrant needing support for the final year of a level course to gain entry to a polytechnic.

Inquiries, either about membership or about help with grants, should be addressed to The Educational Grants Service, 201-203 Woodland Road, London E8 4AU.

Andrew Snelson

The author is going to Southampton University to study environmental science.



Small but perfectly informed.

by John O'Leary

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WORLDWIDE

Sanctuary and guardian of the national conscience

One of the enduring clichés of the Communist world is that Poland is a "special case". Although it is a fully paid up member of the Warsaw Pact and Comecon, its agriculture is largely in private hands, its writers and artists are notoriously self-willed and the Roman Catholic church claims the allegiance of over 80 per cent of the country.

In the Soviet Union what the Communist Party decrees is passed down the line like a Mosaic tablet: in Poland Party decisions are viewed with polite interest like an abstract painting, to be ignored, rejected or accepted according to creed and calling.

Even this ostensibly oddball status however does little to prepare one for the shock of the Catholic University of Lublin (KUL). A central feature of a Communist or would-be Communist system is that the state has absolute control over education. Yet since 1918, in the middle of what is now the communist bloc, there has been a university run principally by priests, teaching thoughts that would be considered subversive outside its cloisters, printing its own books, speaking unspoken truths and keeping alive its own Catholic and resolutely non-communist traditions.

This is a very special sanctuary that has sheltered the politically persecuted, that has fought hard for its existence and its independence and is a landmark testimony to the tenacity of the church as a guardian of the Polish national conscience.

The Reverend Izzi Benedykt Radziszewski, formerly rector of the Theological Academy in St Petersburg, founded the university, financing it with the patronage of two noblemen Karol Jaroszyński and Franciszek Skapiński. The Russian revolution and the subsequent turmoil brought this patronage to a swift end but Radziszewski secured the financial backing of the Polish Episcopate which groups all the country's bishops and lay Catholics.

This persists to the present day with a third of the running costs coming from quarterly collections held by parish priests throughout Poland. The rest of the money comes from the Society of Friends of KUL – some 400,000 Polish Catholics who make regular donations – and foreign contributions, especially in America and Canada.

This financial base gives the church some leverage with the government in asserting the independence of KUL. But the government can limit this power. The ministry of higher education defines the broad framework of the university curriculum, it restricts – as it does all state universities – the number of lay students, it has the final say over whether a KUL degree should

Focus on two very different universities. Roger Boyes reports from Warsaw on the resolutely non-communist Catholic University of Lublin and (below) Bill Purdue on the enterprising new University of East Asia

Czeslaw Milosz receives an honorary degree at Lublin (right). Below: the Pope is a former KUL teacher



smoke in the quadrangle, flicking back long hair. Theatre groups thrive – but so does questioning politics.

Among the student noticeboards there is one still earmarked for Solidarity, the banned trade union, presumably awaiting its return. Students, both priests and lay Catholics, have been involved in protests in support of Solidarity and there is not much doubt that a majority of the staff is behind them.

Were you a member of Solidarity, I asked Irena Slawinska who has taught at KUL for decades and who is now professor of drama. "Of course," she said. "Who was not?"

The Ministry of Higher Education had decreed that KUL should suspend or expel some dozen students active in Pro-Solidarity protests. The rector appealed to the Catholic primate cardinal Jozef Glemp who then intervened with the Polish leadership. With that kind of staff-student solidarity there has been little demand for more student participation in university decision making.

The Higher Education Act of 1982 – though it does not reach the democratic pinnacles once demanded by Solidarity – gives a substantial say to the university in electing its own rector. But in this respect at least KUL lags a little behind some universities in the state sector – perhaps there will eventually be student participation at the higher reaches, but at the moment, the staff say, there is no popular pressure to do so.

The autonomy of the university is secured by a statute ratified by the church and, in 1938, by the Polish republic. This statute grants KUL an equal status with state universities as regards students' rights and privileges. It also guarantees students an equal social status in employment opportunities.

In fact it does not always work out quite like that. KUL graduates who want to embark on university teaching careers outside their alma mater sometimes have problems and many have to start up the career ladder as provincial schoolteachers. Some university staff see this simply as part of a national trend: deteriorating graduate employment prospects is not an exclusively western feature.

Even so, in the 1960s the government's power to withhold jobs was quite clearly used against uncomfortable KUL graduates and even now the Lublin provincial authorities make no great secret about their preference for state graduates over those from KUL when given a choice. Perhaps they are afraid that the KUL graduate with his full share of banned history and banned literature will prove to be a subversive influence on their charges. Perhaps they are right.

Karol Wojtyla, later to become Pope John Paul II taught ethics at KUL and to this day ethics is a compulsory subject for all students – another unique feature in an East European university. Ethics in theory, ethics in practice. The university has given shelter to those like Professor Slawinska who were thrown out of

their jobs for participating in lay Catholic activities (in her case, in 1949) or more overt politicking.

It has always stood up for the correct Christian attitude in difficult political times. In 1939 KUL professors, university officials and students were arrested by the Germans, some of them sent to prison, others to concentration camp. Two lecturers, Father Michal Niechaj and Czeslaw Martyniak were executed. In the Stalinist era the rector and five professors were arrested.

After martial law was declared in the winter of 1981, at least one lecturer was interned. In common with other universities, KUL was suspended for some two months by the martial law authorities so that it could not become a focus for opposition.

The motto of the university is *Deo et Patriae* – God and country – and the essence of the university's teaching is that the Catholic faith has a specific mission in Poland. That message was driven home recently by a conference at KUL in which Poland's two cardinals, more than 20 bishops and hundreds of theologians took part. With all the subtlety of the church, its historical and biblical allusions, the participants made clear that the Catholic faith, and perhaps even KUL, would outlast communism in Poland.

That lesson is understood not only by cardinals and bishops, but also the acetic scholars of KUL and even the fledgling priests who after evening demonstrations clamber through the windows of their locked dormitories.

Portuguese, English, computer studies and advertising design.

The open college, which teaches courses designed by the Open University and New Zealand's Massey University, began its first academic year in September 1982 with over 1,000 part-time students, mainly in Hong Kong. As yet, however, it has not obtained permission from the Hong Kong authorities to open study centres and face to face teaching there.

The university is an ambitious venture. Its more modest aim of providing opportunities for Macau students and becoming a major resource for the local economy has already been achieved. Its wider ambition to become an international university can only be realized in the course of several decades.

There are difficulties in recruiting and retaining staff in certain areas, for Macau, although a fascinating place, does pose problems for expatriates who can find themselves somewhat isolated and claustrophobic. The success of the Open College venture will depend greatly upon a decision to be taken by Hong Kong's University and Polytechnic Grants Committee which is at present considering the question of an Open University for Hong Kong.

A considerable boost to UEA's morale was given by the success of a joint Open University/UEA delegation to China last autumn. Peking's approval is essential to any enterprise in Macau and is fundamental to the university's aim of forging links between the People's Republic and China outside the Republic.

Small but ambitious

of the first students in 1981, some continue to argue that the university is too closely allied to business interests.

One must, however, look beyond Macau. Although it badly needs the skills of higher education to assist in its industrial and commercial growth, it is too small to support a university. The future of the university depends upon the establishing itself as a major university for the Chinese community outside the People's Republic of China as "Chinese territory under Portuguese administration". After its heyday as a principal trading centre of the Orient, Macau, bypassed by Hong Kong with its deeper harbour, more dynamic merchants and efficient administration, experienced a long period of decay and decline. In the last few years, however, it has undergone a transformation into a burgeoning industrial and commercial centre.

Since its inception the university has been intimately connected with Macau's frenetic modernization. In early 1978 a consortium largely composed of Chinese businessmen with interests in Hong Kong, Singapore, the Philippines and Canada put forward a package of proposals to the governor of Macau which included the founding of a university.

Many doubts were expressed by the more official as to whether the site for the university, provided by the Portuguese authorities, was big enough to accommodate use and, even if the location of the main buildings and the admission

the private enterprise backing for the university is generous and a great deal of expenditure has been necessary to get the university to its present position with an attractive campus and during 1982/83 some 450 residential and 2,500 part-time students. There are, however, limits to the finance available which have resulted in an academic base which is dangerously narrow and a dependence upon fee income to promote further expansion.

For full-time degree students in the university college, three degree courses are available in arts, social sciences and business administration. There were only 60 such students in the first year, although entrants doubled in year two and almost all of them were pursuing business administration, raising the question of whether the university would achieve sufficient breadth.

As well as university college, three other colleges nestle under the UEA umbrella, the junior college, the college of continuing education and the open college. A majority of the full-time residential students are, in fact, members of the junior college studying to a level standard. The college offers an important ladder of opportunity to students from Macau who may previously have had little opportunity to study English.

The college of continuing education offers both full-time and part-time courses in areas such as

Portuguese, English, computer studies and advertising design.

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logy at Minnesota State University.

On heated notepaper which appropriately bears its name in both English and Korean, the British Association for Korean Studies (BAKS) announced its first full conference. In Sheffield last week. The chosen theme was the centenary of Anglo-Korean relations - in 1883 the first treaty between the two nations was signed. Scholars from both Britain and Korea give papers on various aspects of the two countries' relations: diplomatic, commercial, literary, religious, and military.

All well and good, one might feel: an encouraging example of growing links between British academics and a fascinating yet neglected country.

But to engage in Korean studies is to live in a political minefield. Every move, every decision has political implications, however trivial it might seem.

Take that headed notepaper, for instance. The Korean version of BAKS' name is rendered in Chinese characters: in South Korea, where characters are used as well as the Korean *hangeul* alphabet, this would be normal practice. There are, however, two states on the Korean peninsula. In North Korea, Chinese characters are no longer used. Wittingly or otherwise, the notepaper offends North Korea - not a very auspicious way to start.

It gets worse. The characters used for "Korea" spell *Hankuk*, the name South Korea uses. North Korea, on the other hand, calls itself by the older term *Chosen*. So the slight to North Korea is compounded. On this showing, BAKS might just as well call itself BAKS.

One apparently trivial example serves to illustrate the extraordinary difficulty of studying a nation which is divided into two states, each of whose prime foreign policy goals is to frustrate the other. Moreover, the context in which we have to operate is itself far from neutral. For obvious reasons of postwar history, 99 per cent of Britain's existing Korean links are with South Korea. Indeed, we "do not recognize North Korea as a state, nor recognize the authorities there as a government"; or so I was informed by Lord Belstead when he was a junior minister at the Foreign Office. To run home this point, HMO's current policy is to refuse visas to North Koreans except those visiting for commercial reasons so even if we had invited North Korean scholars to the BAKS conference, they would not have been allowed in.

North Korea has built itself a reputation as both unpredictable and unreliable in dealing with the outside world and would certainly have balked at our conference theme. Not only because, strictly, there are no "relations" with Pyongyang to celebrate; but North Korea also takes a decidedly dim view of that treaty of 1883, preferring to regard it (like its predecessor with the US in 1882) as part of the inequities of imperialism imposed on a declining, late feudal Korea. So a seemingly harmless peg on which to hang a conference turns out not to be neutral, either.

Given the delicate problem of maintaining, or seeking, to maintain even-handedness between North and



Dead dictator Park Chung Hee

American fighter pilots in the Korean War used to fantasize blackly about being shot down and not knowing on which side of the North/South parallel they had landed; a few degrees of latitude meant the difference between prison and possible torture, and succour. Nowadays, we are little more aware of differences in language, script, culture and the Koreans are still lumped together. AIDAN FOSTER-CARTER considers the problems of "disinterested" academic study of a politically sensitive area, and one which is all the more controversial given recent events and Korean relations with the super-powers.



Park's successor, Chun Doo Hwan

Korean minefield

South Korea as states, what sort of dealings should one have with the present regime in South Korea? As is widely known, power in Seoul is wielded by a military dictator, Chun Doo Hwan, who elbowed his way to the top in the months after the previous similar strongman, Park Jung Hee, was shot by the head of his own CIA in November 1979. Chun cemented his rule by massacring the citizens of the city of Kwangju, who had risen in defence of democracy. Under Chun, like Park before him, universities are infiltrated, students are intimidated and beaten up, and professors (like other critics) are dismissed and jailed.

Ironically, however, this regime which keeps its own intellectuals on a tight leash goes out of its way to lavish attention (and more) upon foreign academics. Indeed, Seoul's enthusiasm for winning friends and influence has in the past carried it well beyond what is proper or even lawful. As revealed in the "Koreagate" scandals in the USA in the late 1970s, the South Korean CIA constructed a truly monstrous web of bribery, corruption and sharp practice.

US academic opinion was a major target of the CIA. Thus, for example, something called the "Research Institute for Korean Affairs" was set up near Washington DC in the early 1970s, headed by a former general, Kang Young Hoon. Rika, it was later revealed, was largely funded by the CIA, though this source was concealed by what the Congressional report called "a large-scale laundering operation".

In December 1976, as the Koreagate revelations were beginning to break, Kang Young Hoon left the USA. Rika folded soon after. But former general, former Professor Kang was to embark on yet another career. For he is currently accredited ambassador of the Republic of Korea to the Court of St James and his - on this record, at least ambiguous - presence graced the BAKS conference in Sheffield.

There are three possible positions for the disinterested scholar. The purist one, which has much to commend it, would keep a firm distance from both Korean governments, and avoid doing anything which indicates either a leaning to one side or a commitment to a dictatorial regime. Above all, it would refuse to take a penny (or a word) from either of them.

Unfortunately but perhaps predictably, examples of such purity - whether individual or institutional - are few. Even in the USA where major alternative sources of funding for Korean studies exist, only the University of Washington to my knowledge has refused South Korean support. Many others have actively solicited it.

Here in Britain, the Korean Traders Association has for several years been funding two posts in the Korean Studies Unit at Sheffield, one in modern history, the other in language. As a result, the numbers of people enabled to learn Korean, in the UK have multiplied. There has been no suggestion of any KTA or other Korean interference: KTA donates, and Sheffield disposes.

Despite the theoretical attraction of the purist position, to implement it in Britain would easily mean that there would be no Korean studies whatsoever. In such a situation, then, Korean funding may make the difference between something or nothing. Provided everything is open and above board, and there is no question of influence or interference, it should be accepted. This then is my second position: a cautious acceptance of aid, without strings attached.

The risk, however, is that this may slide imperceptibly into a third position, which is very much to be objected to: namely, that acceptance of South Korean funding leads one to restrict the scope of Korean studies in such a way as to avoid raising contentious issues and giving offence. This is a very active risk in the Korean case, as can be seen from the record of the Association for Korean Studies in Europe (AKSE).

Undoubtedly, for most of its members most of the time, AKSE is no more than a normal academic organization of area specialists. As it happens, most European Koreanists (unlike their US counterparts) specialize in arts subjects rather than social sciences, and in traditional rather than contemporary Korea. It has thus not seemed as insistently artificial as it might have done that successive AKSE conferences have steered resolutely away from discussing the societies, economies or politics of post-1945 Korea.

Yet it remains the case that AKSE's foundation at least dovetailed neatly with a plan for regional Korean studies association masterminded from Tokyo by one Choe Suh Myun, a convicted murderer later exposed as a KCIA operative. AKSE's first conference, in London in 1977, was also highly contentious: it turned out ultimately to have been substantially but indirectly funded by South Korean government sources. Finally, not surprisingly perhaps, AKSE has had uneven success in attracting East European Koreanists, and almost zero in approaching Pyongyang.

It would be a tragedy if BAKS were to go the way of AKSE. Not that AKSE is either corrupt or useless. But it has consented, in my view, to being severely circumscribed if not compromised. And the oft expressed wish, by some of its leading lights, to "exclude politics" seems like a willful self-inflicted lobotomy, as well as exceedingly naive.

In a much less ambiguous instance of what not to do in Korean studies, many of us in Korean Studies received earlier this month an unsolicited gift of what turned out to be five handomely bound and produced cassette tapes. With them came a letter from the managing director of Audio Learning Ltd, a London firm, announcing their "Korean Studies Cassette Library". No

other indication of source or sponsorship was given.

Four of the five tapes are of scholarly interest, although the tenor of the two on economic issues and reunification is markedly conservative (the other two are on music and art). All of these would seem to be of American provenance. The remaining one, however, features two luminaries of the British academic far right: K. W. Watkins of Sheffield, and Prof. H. S. Ferns of Buckingham. Both are renowned more for their apparent support for Seoul than their specialist knowledge of Korea.

Their account not only praises the allegedly "democratic" Chun Doo Hwan regime, but in its survey of South Korean political history completely omits any reference to the brief periods of democracy between dictators, in 1960/61 and 1979/80. One is used to history being treated this way in Pyongyang, say, with inconvenient episodes simply being deleted from the record. But here in Britain 1984 would seem to have arrived a year early.

It is depressing, then, that the South Korean government has evidently not yet learned to be open and honest enough to label activities which it has manifestly sponsored with the equipment of a government health warning. No less disconcerting, is the apparent willingness of a British firm and British academics to go along with this. Unacknowledged subvention of supposedly "independent" and neutral initiatives was a hallmark of Koreagate. We do not want to see the same thing happen here.

Still less should we countenance another old Seoul dirty trick at the Association for Asian Studies conference in San Francisco earlier this year. Two speakers scheduled to give papers on Korea with somewhat critical titles were contacted by local South Korean consuls: one, who was Korean, found it prudent as a result to withdraw his paper.

Of this, so far, there is as yet no evidence in this country. I trust it will remain so and that in future BAKS will not hesitate to feature papers - or even whole conferences - whose line may not be to the liking of Seoul (or Pyongyang, for that matter, though that we have accomplished already).

Finally, one of the few things North and South Koreans agree on is a concept called *chaju*. Difficult to translate (and akin to the better known North Korean *juche*), it means something like: independence, autonomy, being master in one's own house. But it has consented, in my view, to being severely circumscribed if not compromised. And the oft expressed wish, by some of its leading lights, to "exclude politics" seems like a willful self-inflicted lobotomy, as well as exceedingly naive.

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The author is a lecturer in sociology at the University of Leeds.

Failings of the exam system

There is, in practice, a great watershed between those educators who pessimistically believe that an enthusiasm for learning is a rarity - perhaps even a suspicious abnormality - and that the majority of students require frequent touches of the whip to ensure forward educational progression; and those who are convinced that the learning process is intrinsically exciting and naturally sought by the majority.

In the same way management philosophies are divided into belief in the big stick and the belief that everyone wants to work well and given half a chance will do so. The big stick view of education, like most such philosophies, provides short-term benefits by concentrating on the needs of the educators at the expense of the education.

While actual, physical brutality is no longer considered a decent element in the educationalist's tool-kit, much of the remainder of that outwardly respectable tool-kit suffers from similar deficiencies in outlook and a similar poverty in its orientation.

At the heart of the system is the (usually unspoken) axiom that competition is as natural, beneficial and necessary to education as it is to society; if there is no race, there is no incentive.

Few who applaud the current system - in education, as in society - would deny the validity of its jungle-warfare view. On the contrary, the fierce exultation of parents and teachers when their children "win" endorses the belief in winning over losing, of academic "success" over "failure".

Such a philosophy teaches pessimism. All other things being equal - determination, level of involvement, capacity for work, enthusiasm - to label one student as a success because of scores in A levels, and another as not by virtue of a level "failure" is as offensive and irrelevant as calling him or her a failure for being black, or blue-eyed or below average in height.

To praise a lazy and calculating student for reaching a 2:1 when his or her abilities are recognizably those of a first class honours candidate is as stupid as to label someone a "third" when obtaining this level of achievement called upon total dedication, work and enthusiasm.

If we are going to insist on a grading system for human endeavour, then let it at least be related to the individual's potential and not to an artificial, mathematical curve of some distribution curve of human competence.

The existing competitive philosophy runs against the natural current of

Grading children into winners and failures is misguided and destructive, argues J R Bureau

the young's curiosity and their interest in unravelling new subject areas. It is not possible to administer examinations, or any other grading system, without recourse to fairly rigid curricula.

The student quickly finds available time heavily determined by pre-set areas of "learning". It is rarely possible for the student to pursue subjects not central to the curricula, to pursue obscure paths, go down cul-de-sacs, ferret out unusual information, develop a hobby - like enthusiasm for very specialist areas.

While all these activities are arguably at the very core of education, the grading system firmly punishes any serious deviation from the set curriculum by finding it difficult to incorporate such work into the grade given. Well-trodden paths.

As a result the education system is actively training the student to understand that many real educational values are unproductive because they get in the way of examination-requirement educational values.

In addition, the rigidity of the system, brought about by a competitive view of the role of education, is also very bad for the teaching profession, for a number of reasons.

The relationship between teacher and student is at its best when they consider each other as more or less equal, with only experience and expertise separating their talents. If the teacher is considered by his or her students first and foremost as the arbiter of how they will be measured and rated, the relationship becomes dramatically unequal. If such a situation is bad for education, it is also very corrupting for the teacher.

The quality of teaching is, in the current educational system, largely independent of examination achievement. While the exceptionally good performer levels in examinations the very bad teacher is unlikely to do very badly, because the fixed curriculum, makes it much more difficult for the students to opt out of those

subjects being badly handled.

In a fluid system, where students change subjects and courses as and how they wish (more or less) the bad teacher would very quickly reveal his or her incapacity. In the eighteenth century in Scottish universities, it is said that teachers were paid per capita of attendance at their lectures. The American tradition of routine student opinion-of-staff surveys serve the same purpose, if more humbly.

Education viewed as competition has some very destructive effects on the very society it is supposed to enhance. Every field of knowledge - with perhaps a very tiny number of exceptions - in the hands of a hard and enthusiastic teacher, is capable of stimulating the interest and even the excitement of virtually any of the nation's children.

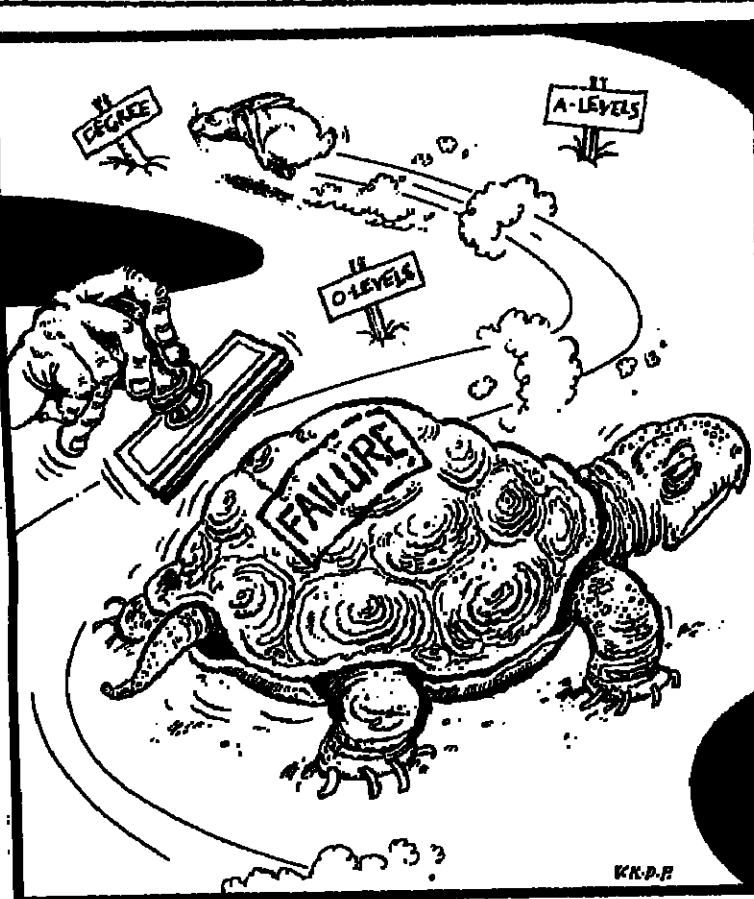
And yet it is the almost universal experience of the taught that the process of education leaves the population only eternally grateful when it's over. While some of the resistance to the learning process must be due to the fact that an inevitable proportion of all subjects are plain hard work, and some of the hostility arises from the poor quality of teaching that is pretty universal, much of the dislike for school generated must be due to the endless rounds of testing and measurement: form tests, term tests, prelims and finals, CSE and O levels - the endless opportunity for the education system to make the child aware of its relative failure in the system.

Thus for a child to find most school subjects boring is "normal"; to have a number of them is universal. Additionally when a pupil fails to understand a subject under such a testing system, it is a matter of shame and anger, where it should be a matter to be simply sorted out until illumination dawns; but teachers under pressure to supply "results" find pushing the quick pupils more rewarding than hauling at the slow ones.

The fixation on measurement and categorization has the unfortunate side effect of adding to that considerable pool of problems known as "bringing up the children". Test scores, class positions, passing and failing examinations and the sub-divisions of honours degrees play havoc in families with parents ambitious for their children.

Society is training its intellectuals to accept the current educational system. There is no conservative like a young conservative. There is no status like *quo*.

Ultimately it seems tragic that



education in our society should be so persistently a matter of cross and dreary hard work, memory tests and constant measurements of personal inadequacy, when the acquisition of knowledge and wisdom should be the most intensely exciting and rewarding of all human activities.

The cure for such a serious disease is not self-evident as to detail, but it is as to principle. What has to stop is the competitive principle which insists on perpetual tests and humiliating labours. Examinations and tests will have to disappear. Entry to all and every institution will have to be open to everyone who chooses to enter, and the state will have to ensure it can cope with any increase in those choosing to take part.

Schools and universities may set framework requirements for particular subjects - as for education in general - but it should be the responsibility of teachers to bring the students to those standard, not the responsibility of the student to prove he has reached it. The framework of specifications for any and all subjects may be - and should be - very demanding.

It will no doubt sound idealistic, utopian - perhaps even wildly eccentric.

In fact it is the way hobbyists educate themselves in the subject of their own choosing and interest. It is the way all real learning happens: by personal interaction between interested teacher and stimulated student, prodded into finding out for himself without admonishment and inculcation of inadequacy.

While ultimately the details for alternatives to present educational systems are crucial, in the first place they are not as relevant as the discussion which must take place as to the diagnosis of the disease. When there is acceptance that competitive examinations and certification are the demonic principles at the core of the education's disease, then society is ripe for radical change.

One useful start in our universities might be to change nothing except to greet the fresher on his first day with the university's gift of a (general) degree. The three of four years that follow can then be devoted to education and not to the acquisition of the parchment. Which are not the same things.

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Wanted: a degree of direction

According to the DES/Welsh Office Handbook of Long Courses for Teachers 1980/81, some 55 tertiary institutions provide master's degrees in education. The 55 institutions are comprised of 32 universities, nine polytechnics and 14 colleges or institutes of higher education. Every one of these master's programmes involved course work and the presentation of a dissertation. Hence, for example, the much discussed credit ("rolling ball") system remains largely untried.

These statistics raise a number of interesting points. First, the universities continued to offer the most, and widest range of taught master's courses; a situation unlikely to change in the near future. Second, most of the 23 other institutions mounted their courses during the 1970s often in response to the changing face of teacher education as much as student need. This represents a significant increase in the number of degrees offered at this level over a comparatively short period of time. Third, the growth in the influence of the CNA is most marked. Explicitly, 15 non-university institutions had their degrees validated by this body. CNA's increasing influence is manifest by the fact that it awarded 70 per cent of the higher degrees in education which it awarded rose from 309 to 1313. Fourth, by 1980 and despite the problems of accreditation, colleges and institutes of education offered 50 per cent more taught master's courses in education than the polytechnics.

Thus expansion in master's degrees in education is a recent event which has occurred within a system, ridden by change and instability and as a programme response to a peculiar set of circumstances. This has had an impact on the character and quality of courses being offered, which may or may not be deleterious to the standards tacitly demanded of higher degrees. The need for master's degree courses in education is being met only partially and there is a need for more effective course design.

Course planners must take their clients' needs into consideration. Primary or secondary teachers require courses which enhance their professional self-concepts and abilities. To achieve this, many more master's courses should be school-focused and enable the recipients to benefit and put into practice what they have learnt. This is not new - the Universities Council for the Education of Teachers (UCET) recognized the problem some time ago.

A number of issues have recently emerged which have substantially altered and increased the pool of candidates for master's courses. Since the late 1970s, teaching has become an exclusively graduate profession and non-graduate teachers have been encouraged to do in-service degrees. The existing structure of many advanced diploma and certificate courses is unsuitable and many traditional diploma and certificate courses have been gradually replaced by MEd degree programmes. The teaching profession has contracted following a decline in the birthrate. This trend is already beginning to result in an increasingly static and ageing teaching force for whom the normal avenue of promotion have been blocked. This being so, other ways of enhancing feeling of professional competence are sought. Some

teachers have found this through advanced study; quite correctly, many teachers take a great deal of pride in the possession of a postgraduate degree. It is doubtful, however, whether this increased demand for higher degrees has increased the quality of education in British schools. Why? The answer is complex.

Staffing for MEds is often diverse and ad hoc, course content is often arbitrary and reflects staff competence rather than need, standards and criteria for assessment are frequently loosely articulated and there is a lack of guidance by external support bodies for course development. In some ways it is probably fair to draw an analogy between the work of Bernbaum, Reid and Patrick in their inquiry into the *Structure and Process of Initial Teacher Education in Universities in England and Wales* (SPITE) and the prevailing situation in the different kinds of MEds currently on offer. In their report, the authors draw a parallel to the diversity of practice which persists in the 23 university departments of education which offered PGCE courses in 1979/80 both in terms of course content and structure. A similar project into the operation of master's degrees in education would reach the same conclusions.

Moreover, it is hard to avoid a feeling that while some master's degrees exact the highest standards from students, others are little more than second, undergraduate courses in education. In this respect, there are frequently significant differences between research and taught master's degrees in education.

Traditionally, access to postgraduate education has depended upon the possession of either a very good hon-

ours degree or a SSRC or DES grant or both. With the increase in demand there has been a reduction in qualifying standards for teachers wishing to do higher degrees. In the main this is no bad thing; teachers should be encouraged to do advanced work and professional competence is not necessarily reflected in the possession of a first class honours degree. There is, however, a danger that with a booming market (and this applies to both British and overseas students), some institutions may lower their entry standards in order to cater for larger numbers of students. In this situation there is a definite danger that the standard of the degree may become devalued.

This is more likely to happen in university departments of education who have autonomy over their admission regulations, than many polytechnics and colleges, whose students are subject to the stringent and rigorous assessment procedures of the CNA, which ironically are set and monitored by university as well as non-university personnel. It is to the credit of many university departments that those temptations are being resisted and standards maintained whenever possible.

There are no ready panaceas or solutions which will overcome existing problems. Indeed, for reasons which have little to do with educational values, things may get worse rather than better as expertise in some institutions fails to be replaced.

Leaving staff to one side, another aspect of the idiosyncratic nature of

The present direction of master's courses in education is not fixed securely enough to a sound rationale for progress and improvement in teacher education, say Ken Reid and David Hopkins. They argue that although the demand for and provision of master's degree courses in education is burgeoning, little is known about their quality, design or effectiveness.

courses is disagreement on course content. This problem has many bases and one of them is of critical concern for teacher education. Teacher education is not regarded as a discipline. In the past this has militated against the emergence of teacher education as a field of study in its own right.

The theory practice dichotomy has long been recognized as problematic in teacher education. Nevertheless, the blending of the two is difficult to achieve, despite the fact that the one cannot effectively exist without the other. The utilization of a problem-centred approach, the school focus, appropriate pedagogy, teaching styles and a suitable learning milieu, suggest a practical way of approaching this issue. Encouraging students to theorize about practice and to regard theory as hypothetical and intelligent rather than correct is part of the same approach.

There is a real need for more innovation, experimentation and research into the structure and content of master's degrees in education. Just as some initial teacher education courses have recently been the subject of considerable scrutiny, so it is time that master's degrees received similar attention. Without such work, the real issues will never be fully understood.

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If I were God...

little chance of stopping tooth decay or halting war, what is there left to fantasize about? Well, I like to picture myself being referred to in reverential tones by grey-haired, academic-gowned colleagues as "a President of the United States".

The next question is this: On what basis would I be elected? I like to picture myself being referred to in reverential tones by grey-haired, academic-gowned colleagues as "a President of the United States".

Now I'm 43 and have been neither elected nor appointed; my highest elected office to date is that of vice president of the Savoyers Bay and

the academic community, myself included.

The obvious place to start observing is wherever you happen to be. When I was at high school in Baltimore, The school's biology class was no different from the one I had in the Stateside New Jersey or New Mexico. When I was an undergraduate in Vermont, my botany course taught us nothing special about the plants and flowers of that region. When I was a graduate student in the heart of New York City, no psychology was offered in urban psychology.

It's not just a matter of the environment affecting the institution; any limited financial resources should have a positive effect of the town or region it serves. While our main obligations must be to truth, knowledge, and wisdom (and the conveying of this to students), I believe academic institutions must offer something to the surrounding town or countryside or neighbourhood.

So I was president of the first thing I'd do would be to encourage my colleagues to think about their place in the community.

view that the main function of an introductory course is to introduce. It could give a decent taste - not a watery or a sugary substitute, but a real taste - of psychology or geology or zoology to the student who may eventually pursue a career in an entirely different field. The introductory course should be designed for students seeking a broad education, not for the specialist-in-training.

There are certain actions which are both right and smart; involving students in university decisions is one of them. I believe that student participation in decision-making has always been ethically correct; in times of falling rolls and falling finances, it's the most intelligent course as well. The student body as well as faculty and administrators should be regularly involved in solving the problems and facing the responsibilities which confront their institution. What's at stake for us is at stake for them as well.

Probably the best known study in social psychology was conducted by Milgram. He found that a large number of people would follow an authority figure who was giving orders to a person who was being punished. The study was conducted in a laboratory setting, but the results were striking. The study was conducted in a laboratory setting, but the results were striking.

When activities demanded cooperative effort to achieve shared goals (for example, when Sheriff arranged for a truck to get stuck in the mud, requiring the teams to push together to get it unstuck), cooperation and friendship quickly replaced the earlier feelings.

Many colleges and universities today are stuck in the mud. Faculties and presidents file lawsuits against one another, presidents and boards of directors issue angry press statements about one another, and departments claw at one another for an extra cent of shrinking funds. No one proposal will resolve these problems; cooperative activity to the rescue. I suggest that the university as a whole can undertake a project, one that requires the combined skills and strengths of all its members to succeed, the project designed to solve the problems and facing the responsibilities which confront their institution. What's at stake for us is at stake for them as well.

If all this seems a big step down from ruling the universe, somehow I'm not all that disappointed. Now that I'm 43, I'm not so sure I want all the responsibilities of a real god.

The author is coordinator of the behavioural sciences at Otago Polytechnic.

Jules Older

When I was very young I'd sometimes daydream about what I'd do if I were God. Later I made a downward adjustment, imagining what it would be like to be a king. When I learned in school about the Holy Roman Empire and discovered that emperors had it all over kings, I moved my fantasies back up a notch, but there was another downward slide as my dreams became more patriotic and less global. I began to plan what I'd do if (when) I became President of the United States.

Now I'm 43 and have been neither elected nor appointed; my highest elected office to date is that of vice president of the Savoyers Bay and Foreman Residents and Ringers Association, incorporated. This is indisputably down-market from the position of a major deity, and I think some sadness that I must record that even my fantasies have been corrupted with age. No longer do I dream of ending segregation, of giving everybody straight teeth, doing away with acne, or turning swords into ploughshares (though as a boy in Baltimore I had only the vaguest notion of what a ploughshare might be). Now when I daydream, it's of what I would do if I were president of a small to medium-sized college or university. I take some comfort in the fact that I haven't yet hit the old row of fantasies, imagining what it would be like to be a department chairman.

Given that a college president has

On headed notepaper which appropriately bears its name in both English and Korean, the British Association for Korean Studies (BAKS) announced its first full conference, in Sheffield last week. The chosen theme was the centenary of Anglo-Korean relations - in 1883 the first treaty between the two nations was signed. Scholars from both Britain and Korea gave papers on various aspects of the two countries' relations: diplomatic, commercial, literary, religious, and military.

All well and good, one might feel: an encouraging example of growing links between British academics and a fascinating yet neglected country.

But to engage in Korean studies is to live in a political minefield. Every move, every decision has political implications, however trivial it might seem.

Take that headed notepaper, for instance. The Korean version of BAKS' name is rendered in Chinese characters: in South Korea, where characters are used as well as the Korean *hangeul* alphabet, this would be normal practice. There are, however, two states on the Korean peninsula. In North Korea, Chinese characters are no longer used. Wittingly or otherwise, the notepaper offends North Korea - not a very auspicious way to start.

It gets worse. The characters used for "Korea" spell *Hankuk*, the name South Korea uses. North Korea, on the other hand, calls itself by the older term *Chosen*. So the slight to North Korea is compounded. On this showing, BAKS might just as well call itself BAKS.

One apparently trivial example serves to illustrate the extraordinary difficulty of studying a nation which is divided into two states, each of whose prime foreign policy goals is to frustrate the other. Moreover, the context in which we have to operate is itself far from neutral. For obvious reasons of postwar history, 99 per cent of Britain's existing Korean links are with South Korea. Indeed, we "do not recognize North Korea as a state, nor the authorities there as a government"; or so I was informed by Lord Belstead when he was a junior minister at the Foreign Office. To ram home this point, HMGO's current policy is to refuse visits to North Koreans except those visiting for commercial reasons so even if we had invited North Korean scholars to the BAKS conference, they would not have been allowed in.

North Korea has built itself a reputation as both unpredictable and unreliable in dealings with the outside world and would certainly have balked at our conference theme. Not only because, strictly, there are no "relations" with Pyongyang to celebrate; but North Korea also takes a decidedly dim view of that (like its predecessor with the US in 1882) as part of the inequities of imperialism imposed on a declining late feudal Korea. So a seemingly harmless peg on which to hang a conference turns out not to be neutral either.

Given the delicate problem of maintaining (or seeming to maintain) even-handedness between North and



Dead dictator Park Chung Hee

American fighter pilots in the Korean War used to fantasize blackly about being shot down and not knowing on which side of the North/South parallel they had landed; a few degrees of latitude meant the difference between prison and possible torture, and succour. Nowadays, we are little more aware of differences in language, script, culture and the Koreans are still lumped together. AIDAN FOSTER-CARTER considers the problems of "disinterested" academic study of a politically sensitive area, and one which is all the more controversial given recent events and Korean relations with the super-powers.



Park's successor, Chun Doo Hwan

Korean minefield

South Korea as states, what sort of dealings should one have with the present regime in South Korea? As is widely known, power in Seoul is wielded by a military dictator, Chun Doo Hwan, who elbowed his way to the top in the months after the previous similar strongman, Park Jung Hee, was shot by the heirs of his own CIA in November 1979. Chun cemented his rule by massacring the citizens of the city of Kwangju, who had risen in defence of democracy. Under Chun, like Park before him, universities are infiltrated, students are intimidated and beaten up, and professors (like other critics) are dismissed and jailed.

Ironically, however, this regime which keeps its own intellectuals on a tight leash goes out of its way to lavish attention (and more) upon foreign academics. Indeed, Seoul's enthusiasm for winning friends and influence has in the past carried it well beyond what is proper or even lawful. As revealed in the "Koreagate" scandal in the USA in the late 1970s, the South Korean CIA constructed a truly monstrous web of bribery, corruption and sharp practice.

US academic opinion was a major target of the KCIA. Thus, for example, something called the "Research Institute for Korean Affairs" was set up near Washington DC in the early 1970s, headed by a former general, Kang Young Hoon. RIIKA, it was later revealed, was largely funded by the KCIA, though this source was concealed by what the Congressional report called "a large-scale laundering operation".

In December 1976, as the Koreagate revelations were beginning to break, Kang Young Hoon left the USA. RIIKA folded soon after. But former general, former Professor Kang was to embark on yet another career. For he is currently accredited ambassador of the Republic of Korea to the Court of St James and his - on this record, at least ambiguous - presence graced the BAKS conference in Sheffield.

There are three possible positions for the disinterested scholar. The purist one, which has much to commend it, would keep a firm distance from both Korean governments, and avoid doing anything which indicates either a leaning to one side or a commitment to a dictatorial regime. Above all, it would refuse to take a penny (or a won) from either of them.

Unfortunately but perhaps predictably, examples of such purity - whether individual or institutional - are few. Even in the USA where major alternative sources of funding for Korean studies exist, only the University of Washington's knowledge has refused South Korean support. Many others have actively solicited it.

Here in Britain, the Korean Studies Association has for several years been funding two posts in the Korean Studies Unit at Sheffield: one in modern history, the other in language. As a result, the numbers of people enabled to learn Korean, in the UK have multiplied. There has been no suggestion of any KTA or other Korean interference: KTA donates, and Sheffield disposes.

Despite the theoretical attraction of the purist position, to implement it in Britain now could easily mean that there would be no Korean studies whatsoever.

In such a situation, then, Korean funding may make the difference between something or nothing. Provided everything is open and above board, and there is no question of influence or interference, it should be accepted. This then is my second position: a cautious acceptance of aid, without strings attached.

The risk, however, is that this may slide imperceptibly into a third position, which is very much to be objected to: namely, that acceptance of South Korean funding leads one to restrict the scope of Korean studies in such a way as to avoid raising contentious issues and giving offence. This is a very real risk in the Korean case, as can be seen from the record of the Association for Korean Studies in Europe (AKSE).

Undoubtedly, for most of its members most of the time, AKSE is no more than a normal academic organization of area specialists. As it happens, most European Koreanists (unlike their US counterparts) specialize in arts subjects rather than social sciences, and in traditional rather than contemporary Korea. It has thus not seemed as insidiously artificial as it might have done that successive AKSE conferences have steered resolutely away from discussing the societies, economies or politics of post-1945 Korea.

Yet it remains the case that AKSE's foundation at least dovetailed neatly with a plan for regional Korean studies association masterminded from Tokyo by one Choe Suh Myun, a convicted murderer later exposed as a KCIA operative. AKSE's first conference in London in 1977, was also highly contentious: it turned out ultimately to have been substantially but indirectly funded by South Korean government sources. Finally, not surprisingly perhaps, AKSE has had uneven success in attracting East European Koreanists, and almost zero in approaching Pyongyang.

It would be a tragedy if BAKS were to go the way of AKSE. Not that AKSE is either corrupt or useless. But it has consented, in my view, to being severely circumscribed. If not, compromised. And the oft expressed wish, by some of its leading lights, to "exclude politics" seems like a willful self-inflicted lobotomy, as well as exceedingly naive.

In a much less ambiguous instance of what not to do in Korean studies, many of us in Korean Studies received earlier this month an unsolicited gift of what turned out to be five handsome cassettes and produced cassette tapes. With them came a letter from the managing director of Audio Learning Ltd, a London firm, announcing their 'Korean Studies Cassette Library'. No

other indication of source or sponsorship was given.

Four of the five tapes are of scholarly interest, although the tenor of two on economic issues and remittances is markedly conservative (the other two are on music and art). All of these would seem to be of American provenance. The remaining one, however, features two luminaries of the British academic far right: R. W. Watkins of Sheffield, and Prof. H. S. Ferns of Buckingham. Both are renowned more for their apparent support for Seoul than their specialist knowledge of Korea.

Their account not only praises the allegedly "democratic" Chun Doo Hwan regime, but in its survey of South Korean political history completely omits any reference to the brief periods of democracy between dictators, in 1960/61 and 1979/80. One is used to history being treated this way in Pyongyang, say, with inconvenient episodes simply being deleted from the record. But here in Britain 1984 would seem to have arrived a year early.

It is depressing, then, that the South Korean government has evidently not yet learned to be open and honest enough to label activities which it has manifestly sponsored with the equipment of a government health warning. No less disconcerting is the apparent willingness of a British firm and British academics to go along with this. Unacknowledged subvention of supposedly "independent" and neutral initiatives was a hallmark of Koreagate. We do not want to see the same thing happen here.

Still less should we countenance another old Seoul dirty trick at the Association for Asian Studies conference in San Francisco earlier this year. Two speakers scheduled to give papers on Korea with somewhat critical titles were contacted by local South Korean contacts; one, who was Korean, found it prudent as a result to withdraw his paper.

Of this, so far, there is as yet no evidence in this country. I trust it will remain so and that in future BAKS will not hesitate to feature papers - or even whole conferences - whose less than laudable titles are as offensive and irrelevant as calling him or her a failure for being black, or blue-eyed or below average in height.

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The author is coordinator of the Behavioural Sciences in Otago Medical School, Dunedin, New Zealand.

Failings of the exam system

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At the heart of the system is the (usually unspoken) axiom that competition is as natural, beneficial and necessary to education as it is to society; if there is no race, there is no incentive.

Few who applaud the current system - in education, as in society - would deny the validity of its jungle-warfare view. On the contrary, the fierce exultation of parents and teachers when their children "win" endorses the belief in winning over losing, of academic "success" over "failure".

Such a philosophy teaches pessimism. All other things being equal - determination, level of involvement, capacity for work, enthusiasm - to label one student as a success because of scores in A levels, and another as not, by virtue of A level "failure" is as offensive and irrelevant as calling him or her a failure for being black, or blue-eyed or below average in height.

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the young's curiosity and their interest in unravelling new subject areas. It is not possible to administer examinations, or any other grading system, without recourse to fairly rigid curricula.

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While all these activities are arguably at the very core of education, the grading system firmly punishes any serious deviation from the set curriculum by finding it difficult to incorporate such work into the grade given. Well-trodden paths.

As a result the education system is actively training the student to understand that many real educational values are unproductive because they get in the way of examination-required educational values.

In addition, the rigidity of the system, brought about by a competitive view of the role of education, is also very bad for the teaching profession, for a number of reasons.

The relationship between any teacher and student is at its best when they consider each other as more or less equal, with only experience and expertise separating their talents. If the teacher is considered by his or her students first and foremost as the arbiter of how they will be measured and rated, the relationship becomes dramatically unequal. If such a situation is bad for education, it is also very corrupting for the teacher.

The quality of teaching is, in the current educational system, largely independent of examination achievement. While the exceptionally good performance levels in examinations are the very bad teacher is unlikely to do very badly, because the fixed curriculum, makes it much more difficult for the students to opt out of those

subjects being badly handled.

In a fluid system, where students change subjects and courses as and how they wish (more or less) the bad teacher would very quickly reveal his or her incapacity. In the eighteenth century in Scottish universities, it is said that teachers were paid *per capita* of attendance at their lectures. The American tradition of routine student opinion-of-staff surveys serve the same purpose, if more humanely.

Education viewed as competition has some very destructive effects on the very society it is supposed to enhance. Every field of knowledge - with perhaps a very tiny number of exceptions - in the hands of a lucid and enthusiastic teacher, is capable of stimulating the interest and even the excitement of virtually any of the nation's children.

And yet it is the almost universal experience of the taught that the process of education leaves the population only eternally grateful when it's over. While some of the resistance to the learning process must be due to the fact that an inevitable proportion of all subjects are plain hard work, and some of the hostility arises from the poor quality of teaching that is pretty universal, much of the dislike for school generated must be due to the endless rounds of testing and measurement: form tests, term tests, prelims and finals, CSE and O levels - the endless opportunity for the education system to make the child aware of its relative failure in the system.

Thus for a child to find most school subjects boring is "normal": to hate a number of them is universal. Additionally when a pupil fails to understand a subject under such a testing system, it is a matter of shame and anger, where there should be a matter to be simply sorted out until illumination dawns; but teachers under pressure to supply "results" find pushing the quick pupils more rewarding than hauling at the slow ones.

The fixation on measurement and categorization has the unfortunate side effect of adding to that considerable pool of problems known as "bringing up the children". Test scores, class positions, passing and failing examinations and the sub-divisions of honours degrees play havoc in families with parents ambitious for their children.

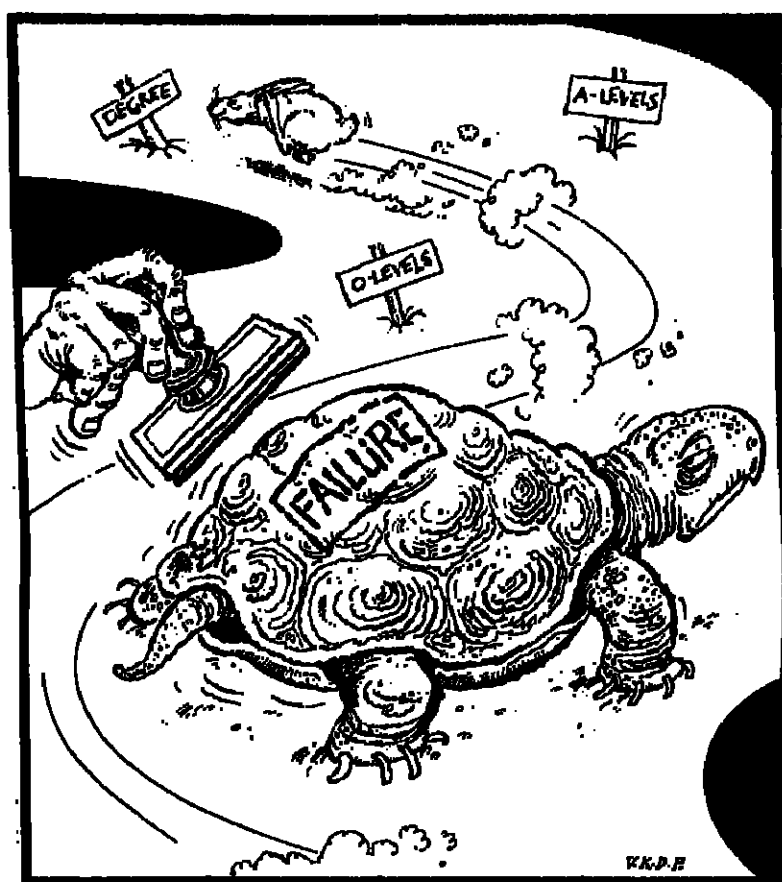
Society is training its intellectuals to accept the current educational system. There is no conservative like a young conservative. There is no status like *quo*.

Ultimately it seems tragic that education in our society should be so persistently a matter of dross and dreary hard work, memory tests and constant measurements of personal inadequacy, when the acquisition of knowledge and wisdom should be the most intensely exciting and rewarding of all human activities.

The cure for such a serious disease is not self-evident as to detail, but it is as to principle. What has to stop is the competitive principle which insists on perpetual tests and humiliating labels. Examinations and tests will have to disappear. Entry to all and every institution will have to be open to everyone who chooses to enter, and the state will have to ensure it can cope with any increase in those choosing to take part.

Schools and universities may set framework requirements for particular subjects - as for education in general - but it should be the responsibility of teachers to bring the students to those standards, not the responsibility of the student to prove he has reached it. The framework of specifications for any and all subjects may be - and should be - very demanding.

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In fact it is the way hobbyists educate themselves in the subject of their own choosing and interest. It is the way all real learning happens: by personal interaction between interested teacher and stimulated student, prodded into finding out for himself without admonishment and inculcation of inadequacy.

While ultimately the details for alternatives to present educational systems are crucial, in the first place they are not as relevant as the discussion which must take place as to the diagnosis of the disease. When there is acceptance that competitive examinations and certification are the demonic principles at the core of the education's disease, then society is ripe for radical change.

One useful start in our universities might be to change nothing except to greet the fresher on his first day with the university's gift of a (general) degree. The time of four years that follow can then be devoted to education and not to the acquisition of the parchment. Which are not the same things.

The author teaches in the marketing department at Strathclyde University.

The present direction of master's courses in education is not fixed securely enough to a sound rationale for progress and improvement in teacher education, say Ken Reid and David Hopkins. They argue that although the demand for and provision of master's degree courses in education is burgeoning, little is known about their quality, design or effectiveness.

Our degree or a SSRC or DES grant or both. With the increase in demand for teacher education, the quality of the standards for teachers wishing to do higher degrees. In the main, there is no bad thing; teachers should be encouraged to do advanced work and professional competence is not necessarily reflected in the possession of a first class honours degree. There is, however, a danger that with a booming market (and this applies to both British and overseas students), some institutions may lower their entry standards in order to cater for larger numbers of students. In this situation there is a definite danger that the standard of the degree may become devalued.

This is more likely to happen in university departments of education who have autonomy over their admission regulations than many polytechnics and colleges, whose students are subject to the stringent and rigorous assessment procedures of the CNA, which ironically are set and monitored by university as well as non-university personnel. It is to the credit of many university departments that these temptations are being resisted and standards maintained whenever possible.

There are no ready panaceas or solutions which will overcome existing problems. Indeed, for reasons which have little to do with educational values, things may get worse rather than better as more and more institutions fail to be replaced.

Leaving staff to one side, another aspect of the idiosyncratic nature of

courses is disagreement on course content. This problem has many bases and one of them is of critical concern for teacher education. Teacher education is not regarded as a discipline. In the past this has militated against the emergence of teacher education as a field of study in its own right.

The theory practice dichotomy has long been recognized as problematic in teacher education. Nevertheless, the blending of the two is difficult to achieve, despite the fact that the one cannot effectively exist without the other. The utilization of a problem-centred approach, the school focus, appropriate pedagogy, teaching styles and a suitable learning milieu, suggest a practical way of approaching this issue. Encouraging students to theorize about practice and to regard theory as hypothetical and intelligent rather than correct is part of the same approach.

There is a real need for more innovation, experimentation and research into the structure and content of master's degrees in education. Just as some initial teacher education courses have recently been the subject of considerable scrutiny, so it is time that master's degrees received similar attention. Without such work, the real issues will never be fully understood.

The authors are principal lecturer and director of educational research, and lecturer in educational research respectively at West Glamorgan Institute of Higher Education. Their book, *Rethinking Teacher Education*, will be published by Croom Helm next year.

BOOKS

Poetry that creates experience

by Anthony Thorlby

The Sacred Threshold: a life of Rainer Maria Rilke
by J.F. Hendry
Corgi Press, £9.95
ISBN 0 85635 369 8

Mr Hendry's appropriately portentous title refers to the legendary seal of the Cumae sibyl, and is taken from a schoolboy essay by Rainer Maria Rilke. In what was to become a characteristic tone of highly self-aware pathos, Rilke declares he will

Kiss the sacred threshold and go on,
a restless, poor wanderer.

The last phrase fits this biographical narrative more aptly even than the first. Mr Hendry recounts Rilke's wanderings and temporary abodes: from the Baltic to Capri, from Russia to Spain; in rented rooms in Paris, in the castle of a princess on the Adriatic, in a small medieval tower high in the Alps purchased for him by a patron.

When young, he imagined for himself aristocratic kinfolk, and all his life he lamented and looked for greater forms of spiritual relationship beyond the confines of his time; he longed to be better connected and rejected the restrictions of the ordinary. In the last decade of the nineteenth century and the first two of the twentieth, he felt more profoundly perhaps than any of his contemporaries, who were all pessimistic in some degree about the decadence of Europe, that a whole epoch of culture and civilization was coming to an end. He even welcomed (briefly) the outbreak of war in 1914 — with a kind of perverse satisfaction at the evident crumbling of a drab and false facade, which would reveal a timeless, elemental reality behind.

The experience of decadence was for Rilke at once psychologically intimate and cosmically grandiose. Hence the tone of his poetry, which is remarkable for its blend of seemingly opposite qualities: sublimely prophetic, mysterious and speculative on the one hand, and on the other very immediate in its appeal to familiar objects and emotions.

Rilke was forever kissing "sacred thresholds", at the feet of monks and of the poor, in cathedrals and in myths, in front of inanimate things and places and people, all of them intensely though fleetingly encountered, because they with a more than personal presence, suggestive of religious reverence, yet without commitment. Rilke moves on, a wanderer, and his position and presence as lyrical speaker are hard to pin down. The lines of his poems lack the focus of a human subject tellably and recognizably placed between the world and the reader.

This sense of a suprahuman consciousness, not tied to conventional observance, explains much of Rilke's (erotic?) appeal and reputation for preternatural, if not mystical, insight; and it has incurred more recently criticism from those who find such social and spiritual evasiveness reprehensible. Instead of such sentimental postures, towards old thresholds should they not be ignored, demolished, or built anew? Even Mr Hendry writes somewhat critically of Rilke's compulsion to re-encounter his inability to commit himself, especially where human relationships were concerned — and there were many in Rilke's life, most of them with women. Like other artists, he is uneasy about Rilke's insistence that lovers must part. He set up the ultimate obstacle to the kind of mutually sustaining love one might consider worthwhile — involving sexuality and parenthood and some form of domestic life. Mr Hendry quotes passages from letters and poems in which Rilke explains the need to avoid "possessiveness", and comments: "Such explanations may have been efforts to absolve himself of responsibility for his own failures with women he had loved."

Mr Hendry recognizes, however, that Rilke's "theory of parting" was more than just willful. It was also a real attempt to school himself to the solitude that had proved the most fruitful condition for creation, a re-



Rilke in uniform. During the First World War he worked as a soldier in the war archives in Vienna.

mark which could do with more thoughtful amplification than it is given here. Poetry must always have been written, after all, pretty much in solitude. For Rilke, however, solitude was not simply a necessary condition in which to write, but the only truly authentic state in which to live; it was not confined to periods of creativity, but permanently permeated his attitudes and perceptions.

The blurb to this book announces that "the life of Rainer Maria Rilke was dominated by one central conflict, which he described in a letter: 'I do not want to surrender art from life; I want them, somehow or somewhere, to be of one meaning.'" Mr Hendry is right to anticipate conflict at the heart of Rilke's ideal, but reflects very little on the reasons for it. The notorious difficulties in Rilke's poetry are a direct expression of it, and his luminous "affirmations" — to which Mr Hendry devotes a rather uncomprehending chapter, summarizing the *Duino Elegies* — are only to be appreciated as rare moments of resolution and reconciliation. These can be breathtakingly beautiful, but also bewildering, pressing beyond the limits of the sayable, and questionable therefore as regards their meaning and validity. In approaching the point where conceivably art and life are one, they boggle the mind with the thought — the now fashionably modern thought — that language is not about the world, but is the world. What does it mean to say this, as Rilke does in one of his most celebrated ecstatic utterances, "There is evidence" (*Da ist Beweise*)? How do we know the meaning of utterance that is not itself a sign of utterance that is not itself a sign of anything other than itself and claims to assimilate that which is other into itself, transforming the world into its pure verbal inwardness of the Ninth Elegy, where all things are said to become invisible?

This desire to reconcile the moral and mundane realities of life with the ideal and contemplative reality of art is not original to Rilke. For Schopenhauer, more before he experienced it, many writers had felt it with the increasing sharpness which the difficulty and perhaps the impossibility of reconciliation inevitably produced. Rilke often expresses the conflict as absolute and perennial: the primary feature of the human condition, and the ultimate challenge to the human spirit, not to respond to it, or to deny it, or to notice it, was to be confronted, and endured, with the terror of "an unending enmity between (human) and (any) great work" to which he must

concerns and perspectives, even personal identity, fall victim.

Mr Hendry quotes this and similar lines — often departing slightly from the original in his translation, and usually dulling (and occasionally misconstruing) Rilke's meaning in the process — but does not see the implication for biography: that an account of Rilke's life is unlikely to tell us anything positive or even interesting about his work. It might, of course, explain an essential element of negativity in Rilke's experience of the world, which becomes a powerfully positive feature of his poetry. His art thrives upon negation; he "waivers" in love (one might equally say, in life) are not a blemish on his genius but its blossom, without which there would have been no fruit. The threshold at Cumae, like all the sacred obligations of the past, acquires a quite new value from the fact of their being abandoned. What youthful presence that Rilke should have known that he would always have to pass on his life, in the dull light of prose, is unimagineable; even his own efforts to attribute personal importance to it, in his own name, in the literal and prosaic context of letters, read like affected exaggeration. How should a biographer hope to do more? Or should he try to do less? Mr Hendry certainly finds few points of connection between Rilke's life and work, or between his actual personality and the voice that is heard in his poems. The man is not unfairly characterized as a "narcissist", whom Mr Hendry seems not to like very much, but the voice of his poems does not represent his own experience, not even his own: they create it. They make us realize that language does something to the world; and that its frontiers are expanded farthest by the language of poetry. Reading Rilke is like an adventure into this new territory, with no possibility of going back to compare or verify the point of departure.

Biography is, then, not the most enlightening way perhaps in which to write about Rilke. Mr Hendry does quote quite a few random lines, and a poem (with his own translation), but his approach gives only a faint impression of Rilke's claim to be considered one of the greatest German poets. The incommensurable interest of his work does not lie in any references to his personal domestic life, or to his life in his society, which is a modern commonplace in danger of sliding into cliché (even in his day). Rilke's remarkable gift for discovery and expression of the relationship between the individual and the world, and

be; and there is a sense in which what words refer to is always in itself unutterable. But at the same time, to speak "in a word" of what is unutterable, is to give it utterance; the act of defining what cannot be said, assimilates its unutterability within the greater compass of language.

This paradox in the character of words fascinated Rilke and he exploited it in his poetry, which celebrates language as the key to man's distinctive destiny on earth. Words have for him more than merely communicative or referential significance. In them two different orders of reality meet and unite to form a metaphysical whole. They derive their meaning as much from what they do not correspond to them in existence as from what does. If they are essentially unlike the things and events to which they refer, they nevertheless have the power to make those same things like themselves, to assimilate them into their own linguistic structures and transfigure experience into articulation. The aura of high spiritual authority which surrounds much of Rilke's best poetry derives from his ability to make us feel the encounter of words with material still raw, inchoate, untamed. His rhythms have a magical quality, like incantation, which expresses the connection of words with existence at a level more profound than that of signification. His words cast a spell in excess of their meaning (and when the spell fails, or paraphrase destroys it, his meaning may appear far-fetched and unconvincing). His poems do not represent his own experience, not even his own: they create it. They make us realize that language does something to the world; and that its frontiers are expanded farthest by the language of poetry. Reading Rilke is like an adventure into this new territory, with no possibility of going back to compare or verify the point of departure.

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their relationship to both speaker and hearer, upon the space inhabited by the human spirit. He learned to speak as it were, the language of wandering and disorientation, and his syntax more compelling than his sentences. The authenticity and authority of his sentences, as they rise to moments of oracular resonance, reside in their structure and figurative texture; these embody the changes in the dimension and perspectives of experience of which they speak, and thus convince the (native) reader of their own existence and truth. Mr Hendry says nothing about the strangeness of Rilke's style or its persuasive power, its construction of a new focus and context of perception, its manner of addressing the reader and implicating him in the relationships of the text. He quotes and translates Rilke's celebrated poem "Archaische Torso of Apollo", but ignores its startling conclusion: "You must change your life." Who must, who says so, and why? To remain merely that Rilke "surely" least from Rodin — who did not excel as a carver — about the quality of "the light intrinsic to the stone, that gives the torso its magical life," is downright misleading, for it directs the reader's attention away from the torso in the poem to the one in the museum.

Biographical curiosity typically makes poetry appear to be descriptive, whereas in Rilke's case especially it is symbolic of, indeed constitutes, a new form of experience. The reason for the torso's radical demand for change lies in the displacement of spiritual energy into the truncated body, due to the absence or destruction of any relationship to the making head. Extraordinarily powerful forces — as strong as stellar radiation, as dangerous as rapacious animality, as seductive as sex — invest this body, and by implication all bodies, once they are constituted of a dominating value, a conventional focus, a head. Without that, the mind is deprived of something quintessentially human to hold its gaze and relate to. In these circumstances, a sense of exposure to elemental and immeasurable forces is so bewilderingly immediate and overpowering that, understandably, a change of life is inescapable. What kind of value judgment is Mr Hendry making, when he calls this poem one of Rilke's "finest"?

It is by way of such textual analysis that the Rilke who matters is more likely to be recognized and appreciated. Not the Rilke who happened to know something about Orpheus, but the quite different, socially unrecognizable but linguistically unmistakable slings of a modern version of Orpheus. One has only to ask who the singer is, where he sings from and to whom, in order to sense how far this singing and the listening it evokes, transcend the limits of any actual human life; that is the secret of their profound appeal. Take, for example, Rilke's lovely famous lyric to the "Meerwunder Nacht", whose melodious harmonies might place it beside Goethe's *Die Lorelei*. A slight similar "Ueber allen Gipfeln" contrast soon becomes apparent. Goethe's voice talks to us as companion in nature's calm. Rilke's voice is no one's and it remains wistfully isolated from nature. Finally, it does become absorbed in rapturous enjoyment and praise of the unity of nature — but only in the metaphorical reality of a poetic conclusion, in which a fierce look what a man cannot. The poetic rapine is achieved at the cost of a literal absurdity as well as a human deprivation — much as the demonic violence of the torso is evoked at the price of its head.

This structural opposition is common in Rilke's poems, where the strength of affirmation is proven against the negative factors that impede, fail to, perhaps no other great poetry is balanced as precariously as his between sublimity and nihilism, with the over-present risk of falling into nonsense.

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BOOKS

Out of bounds

Understanding Education: towards a reconstruction of educational inquiry
by Walter Feinberg
Cambridge University Press, £18.50
ISBN 0 521 24864 7

Feinberg's aims are ambitious and his intentions radical, but both the content and structure of his book are problematic. He wishes to redraw the boundaries of educational studies to encompass the entire process of the social reproduction of knowledge, skills and consciousness, claiming that only by broadening the scope of what counts as education can the educationist cease to provide axiomatic legitimization for the status quo.

His method is to select examples from a variety of fields of educational study — empirical, philosophical, historical — and show inadequacies in their work; and, on the assumption that these are necessary accompaniments of a particular interpretative framework, to suggest that a critique of any such framework should form an integral part of the study. The closing chapters of the book explore the idea of education as social reproduction and characterize knowledge as any representation of reality which "enables individuals to function in and make sense of their social world".

Feinberg's overriding criticism of existing modes of educational inquiry is that they reflect the dominant mode of consciousness which has drawn particular boundaries and excluded the notions of knowledge and education. No doubt such boundaries need constant critical scrutiny and adjustment, but their principled abolition is no solution to the interpretative regress. By including everything within the domains of knowledge and education we may avoid begging any questions, but we also preclude the asking of any that are meaningful.

The major part of this work is presented as a critique, by examples, of existing types of educational inquiry, which claims to be both radical and significant. However, even if we were to accept the IQ controversy as properly representative of empirical research in education, or the analysis of the concepts of teaching and indoctrination as paradigmatic of philosophical concerns in education, there are no questions raised here which have not been more adequately explored elsewhere. That particular social influence, that what empirical questions merit explanation or what concepts merit analysis is now a truism, as is the realization that these explanations and analyses will receive endorsement in proportion to their congruence with dominant interests.

Now is this sense of *déjà vu* the reader's only problem. The two chapters on IQ, for example, move from sketches of Arthur Jensen's methodology and findings, to detailed criticisms of specific test items, to polemic about the uses to which intelligence testing has been put. The validity of research is confused with the morality of policy, and the goals and purposes of individuals are conflated with the functions and effects of institutional procedures. Neither description nor critique of the IQ question is sufficiently rigorous to add anything to that particular issue, though both are sufficiently provocative to obscure that connection to the behaviouralist pedagogy, conceptual analysis, the history of school reform and the development of medical education exhibit the same characteristics.

This book's purpose is to persuade educationists to step outside the limitations of their interpretative frameworks, but its chief shortcoming is that it fails adequately to conceptualize its own. It argues that over-emphasis on education as an individual transaction can only generate reforms about the distribution of life-chances within a given self-perpetuating social reality. This is only true if we share Feinberg's view of education as purely instrumental, and his conflation of

knowledge with belief and custom. No doubt a study of education which attempts to ignore its social setting and function will be powerless to criticize these sources of assumption and constraint. However, a converse approach, which defines education as any process of social reproduction, though it may retain the power of criticism, has foregone all possibility of justification for its critique.

Ruth Jonathan

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The gift of tongues

Language in Multicultural Classrooms

by Viv Edwards
Basil Blackwell, £6.95
ISBN 0 7134 4508 4
Many Voices: bilingualism, culture and education
by Jane Miller
Routledge & Kegan Paul, £10.95 and £5.95
ISBN 0 7100 9331 4 and 9341 1

The large-scale immigration into the UK in the 1960s and 70s means that there are over a hundred languages in use in the country. Early assumptions that all children would learn English naturally have foundered. So have simplistic assumptions that immigrant groups would just "assimilate" to mainstream culture. What is the place of ethnic minority languages in schools? Should they be supported with special teachers, timetabled lessons and O and A level exams? Or should they be left as the responsibility of community schools?

Viv Edwards's book provides a clear, systematic, though rather dry account of the position accepted by most British linguists. Linguistic diversity found in schools does not in itself constitute a problem, but attitudes towards this diversity are of crucial importance, since people's languages are intimately related to their personal, ethnic and cultural identity. The position of immigrant languages cannot be separated from attitudes towards diversity as a whole.

Edwards first discusses four types of linguistic diversity in Britain. There are both indigenous dialects of English (Cockney, Scouse) and also overseas dialects (mainly Caribbean creoles); and there are both indigenous languages other than English (Welsh, Gaelic) and also immigrant languages (Punjabi, Greek). She discusses three of these language types: the Celtic languages get no chapter to themselves, though there are references to Welsh. Second, she provides a useful survey of both the academic literature and of government reports on immigration, race relations and central government and local initiatives (or lack of them) on language policies, plus an appendix on information sources. Third, she provides explicit statements of practical pedagogical principles based on the linguistic literature: on helping children to read; on clarifying and polishing between "mistakes" and regional and social dialect features (nonstandard British and Caribbean). This successfully relates the academic principles to what the teacher should actually do with a child whose language work needs help.

Finally, Edwards gives a little space to cognitive issues. She discusses the crude but common belief that bilingualism is a disadvantage, because the brain is a container of finite size: a language takes up a lot of room, and if a child has two languages in there, there is less room for other things, mathematics, for example. She dismisses the argument by criticizing the faulty design of many bilingualism studies, which compare working-class immigrants from poor areas with middle-class monolinguals.

Jane Miller's study provides some of the personal psychological details missing from Edwards's survey. Almost sixty pages of Miller's book are simply transcribed interviews with a dozen bilingual children and adults. However, although the data are fascinating, her commentary is disappointing, often consisting only



"Study" is one of a series of panels painted by Charles Sprague Pearce for the Library of Congress in Washington DC. Herbert Smith's book *The Library of Congress: its architecture and decoration* is published by Norton on October 19 at £5.25.

of paraphrases. In addition, there is no real discussion of the limitations of such self-report data. The interviews make interesting reading and provide local colour. But I am unclear what can be concluded from them.

Miller's survey chapters on language learning, and on the cognitive, social and educational implications of bilingualism, plus a final very impressionistic chapter on authors who write in a second language (Beckett, Conrad, *et al*), make many clear points, but are very brief, with long undigested quotes from other authors and few independent conclusions.

Michael Stubbs

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Human capital

Investment in Education and Social Choice
by Tapas Majumdar
Cambridge University Press, £15.00
ISBN 0 521 251435

Majumdar informs us that his book arose out of an attempt to answer the simple question: what happens to the economics of education when the market for education is described in terms of investment in human capital, rather than in terms of demand and supply of a consumption good or services?

He argues that the human capital framework is too simplistic, and in particular that its analytical tool — rate-of-return analysis — is both inherently unsound and inappropriate to questions of education because investment in education requires a more complex framework for its proper description. The book is devoted to elaborating his thesis and arguing for a "new economics of education" which recognizes the heterogeneity of decision-making in education.

After setting out his criticisms, Majumdar considers in detail three interrelated subjects which he thinks have been inadequately treated by economists of education. The first of these he calls the "domain distinction", that investment in education is of two different types: investment by individuals in buying education and investment by others to supply education. The second is the "macro-micro distinction", that is the contrast between the basis of individual investment decision making and that of institutional or societal decision making. Thirdly, he draws attention to the "collective choice" nature of decision making in education.

To strengthen his case he examines a number of studies and finds them inadequate as a result of not fully taking account of these three subjects. And in his final chapter Majumdar attempts to classify the types of social choice dilemmas that might arise in educational investment decisions. In the end I found this book disappointing. Majumdar, like so many others, has failed to recognize the distinction between human capital theory and the economics of education. This makes the object of his criticisms somewhat confused, as he argues for a change in human capital

theory, the economics of education, or both? Moreover, there is a related confusion, to some extent stemming from the first: is he claiming that the conceptual basis of human capital theory is unsound (the paradigm is misconceived) or that its empirical basis is suspect (the tools used are inadequate)?

The attack on the economics of education does little more than reiterate arguments that have been going on since 1962. The same applies to his criticisms of rate-of-return analysis which again breaks no new ground. Indeed, it ignores some of the most important current controversies. The chapter on case studies certainly does illustrate the predicament of applying economic tools to educational decision making: it does not, unfortunately, show how these problems can be resolved. It is almost a truism that all economists would like to be political economists, but the reason that they shelter behind narrow quantitative analysis is not that they are unaware of its limitations but that they do not know how to escape them. Majumdar offers little help here.

The book is addressed to economists and "readers in the general field of education". While much of the content would appeal to non-economists the language is sometimes technical — "production possibility curves are usually assumed to be continuous over factor space". In his last paragraph Majumdar states: "The task of providing a more constructive general theory remains". Many economists may feel, as I did, that they have been a little short-changed.

John Mace

John Mace is lecturer in the economics of education at the Institute of Education.

School planning

Curriculum Studies and Educational Planning
by Denis Lawton
Hodder & Stoughton, £3.65
ISBN 0 340 33281 6
Countering Educational Design
by Ted Numan
Croom Helm, £11.95
ISBN 0 7099 0537 8

The professional purveyors of the still-expanding field of curriculum studies now use language replete with such terms as "design", "model", "system" and "evaluation", concepts more appropriate to the world of industry and computers than to the personal world of the school and the classroom. Yet, unpalatable as this may be, there is a justification for this systematic and analytical scrutiny of the school curriculum, especially in the light of increasingly strident government pronouncements on the purposes of schooling. We need to be as aware of the power structure and processes in the curriculum industry as much as any other form of enterprise. In recent years, however, a growing number of educationists have begun to question both the rhetoric and the rationale of curriculum studies.

In the two books reviewed here, we appear to have critics from the two

sides. One of them is yet another work from Denis Lawton who has been centrally responsible for building the study of the curriculum into a major educational subject and who will continue to extend his influence as he takes up his new post as director of London University's Institute of Education. The other book is by Ted Numan, an Australian critic of curriculum concepts and procedures.

Numan argues that the large army of curriculum experts, advisors, consultants and designers now operating in the three countries he considers (the UK, USA and Australia), rather than providing an aid to teachers, have now developed their own professional ideology and momentum which actually serves to control and direct teachers in their schools. The educational enterprise has moved away from the teacher in the classroom and into the offices of middle-management professionals. Numan is especially concerned about the link between educational technologists and curriculum designers, arguing that the former, more than any other group, perceive their function to be scientific and objective. This may be true, but it is unfair to thus typify all curriculum design in the three countries: in the UK there has been strong opposition since the early 1970s to teacher-proof varieties of curriculum design.

The remainder of Numan's book consists of a strategy to assist classroom teachers to develop their own alternatives and to resist the designer's ideology by use of a "developmental" approach of theory and practice generated from the classroom. This is nothing new and comes over as slightly naive.

Lawton's book, on the other hand, moves easily from educational, political and cultural analysis to practical and grounded discussions of the classroom. Lawton has always been in favour of better planning in schools and of more open discussion about aims and objectives — his chapter on "school-based planning" illustrates this. But the theoretical aspects of his book are also interesting, especially where he defends his support for a common curriculum as a contribution to the just society. He is critical of the "efficiency" models of the curriculum and argues for a more open and humane system of education.

It is here that the books come nearest to agreement, although it is unlikely that Lawton would favour the rather romantic grassroots school-based curriculum espoused by Numan. Lawton is far too aware of the complex social and political pressures on the school curriculum to ever believe that teaching can be left entirely to the individual school and teacher. I wonder if there are any schools now, and if there ever were, where teaching is intuitive, idiosyncratic and based on the ill-defined wisdom and experience of the teacher. There can be little exclusively school-based curriculum development in the secondary school in any meaningful sense — regional and national policies are bound to intervene. Both Numan and Lawton agree, however, that we must guard against the worst excesses of instructional technology, curriculum design and the systems approach to the curriculum.

Barry Dufour

Barry Dufour is lecturer in education at the University of York.

BOOKS

Penal reform

Between the Guillotine and Liberty: two centuries of the crime problem in France
by Gordon Wright
Oxford University Press, £15.00
ISBN 0 19 503243 8

Gordon Wright's new book is an important addition to a major debate to which the most influential recent contribution is Michel Foucault's *Surveiller et punir: naissance de la prison*. According to Foucault the essential concern of the movement for reform of the criminal system since the eighteenth century has been to ensure the more effective protection of property and, more fundamentally, to create a "disciplinary society" adapted to the needs of an industrial age - through such institutions as the hospital, barracks, school, workshop and prison. Wright concedes that a legal system is designed to protect the existing social order but insists that Foucault's thesis, while attractive in its simplicity, is really too clever by far. Foucault imputes motives and asserts ideas as facts without empirical proof. Wright is a less dazzling but more reliable guide, concentrating on the development of humanitarian and reformist ideas among sections of the social elite and upon counter-pressures for the intensification of repression derived from periodic bouts of social fear about crime.

France's traditional crime control system was based essentially on deterrence by means of harsh punishment. Ineffective policing meant that relatively few criminals were actually apprehended - but public execution, whipping, penal servitude in the prison hulks all contributed to creating a greater sense of security for *les honnêtes gens*. The publication of a translation of Beccaria's essay *Dei delitti e della pena* in 1765 was a watershed in French thinking about crime. While it represented existing disquiet, it also served as a major stimulus for reformist demands. Beccaria advocated less arbitrary judicial procedures; he said that punishment should be related to the gravity of the crime, and that it should not involve "superfluous" cruelty but should rather inflict the minimum pain necessary to persuade the offender not to repeat his crime, while deterring others. Moreover, the central aim of the law ought to be prevention rather than punishment.

These ideas gradually took hold - torture, for example, was abolished in the 1780s. Following the Revolution the Constituent Assembly embarked on a massive programme of social reforms including that of the penal code, but good intentions came to nothing in the atmosphere of social fear created by war and civil strife. Bonaparte continued the efforts already underway during the Directory to restore public order by means of special courts and summary justice. The new criminal codes of 1808 and 1810 which served as the basis of the criminal justice system until the present were designed to protect social order.

The continuous public interest in crime throughout the nineteenth century and during the first part of the twentieth was linked to growing anxiety about the "social problem" as urban centres grew. Philanthropic efforts to improve prison conditions and reduce the severity of sentencing enjoyed repeated minor successes. But all too often reforming intentions were blocked not only by a lack of consensus among interested parties but by the unwillingness of governments to devote significant financial resources to the unpopular object of improving conditions in prisons. For some considerable time (until 1937) transportation appeared to present a cheap and effective means of ridding France of its most dangerous criminals, especially when mass arrests after the Parisian insurrection in June 1848 and following resistance to Louis-Napoléon's coup d'état in 1851 greatly intensified existing problems of prison overcrowding.

In this century as in the last, government policy has fluctuated. Wide-spread public interest in social reform, following the Liberation and to a lesser degree the socialist electoral victory in

1981 were accompanied by efforts to introduce more humane sentencing policies and prison conditions. Subsequently the apparently inevitable rise of anxiety about genuine or imagined increases in crime rates, whipped up by the media, have led to partial reversals. Wright's conclusion reflects the pessimism of many contemporary criminologists concerning the "illusory" goal of rehabilitation as opposed to retribution and intimidation. He remains mildly optimistic, however, that as in the past the continuing battle between reformers and repressors will lead to limited improvement in the treatment of criminals.

Roger Price

Roger Price is senior lecturer in the school of modern languages and European history at the University of East Anglia.

Called to the Bar

Foundations of the Modern Bar
by Raymond Cocks
Sweet & Maxwell, £9.50
ISBN 0 421 30360 3

Raymond Cocks's book is a study of the development of the Bar from early Victorian times to the beginning of the present century. It is conceived as an essay in the history of professional life that draws on certain explanatory themes and examines the ideas that members of the Victorian Bar had about themselves and their activities. The general impression is that of a series of minor crises absorbed without disaster and of a profession dragged with only a modicum of kicking and a little muted screaming into the twentieth century.

In the earlier period the life of the Bar outside London revolved around the circuit messes whose organization and members are engagingly described. At all levels of the profession the leading figures were popularly portrayed by contemporary writers as men of remarkable capacity and sometimes considerable eccentricity. There was a ready recourse to versification, some of it reaching McGonagallian heights.

Pale Pollock who consumes the "midnight oil"
And plies his task with unremitting toil,
Till as the life-drops from his cheeks retreat,
He looks as though he had fought to the east.

The author sees much that is significant in this early life of the Bar at the sum of individual oratory, adventure and expertise. The ideal of the "great man", he says, both distracted the Bar from questions of institutional reform and affected the way in which they thought about the law.

In the later chapters, the author traces the impact on the Bar, and in London, of the Inns of Court, of demands for professional education and examination; of the Judicature Acts and the new court system; and of Benthamite and utilitarian analysis of the law and its institutions. Two sorts of opposition are seen - though they are possibly distinct and need separate treatment. One is the tension between an attachment to mere technical and practical accomplishment and the demands of philosophical or juristic speculation, represented by writers such as Austin, Maine and Dicey. The other is the conflict between the traditional habits and practices of the unreflected profession, and the need for organized legal education and examination.

By the beginning of the twentieth century the English Bar (like the Civil Service) had yielded to the demands of utilitarianism but not to those of speculation by theory. It remains in that "same condition"; and that, given the close relation between Bench and Bar, tells us much about the British judicial temperament.

This is one of the first two books in the series produced jointly by the Society of Public Teachers of Law and Sweet & Maxwell which aims to publish at subsidized prices "works of high scholarly merit for which the demand may be insufficient to justify publication on a normal commercial basis."

Geoffrey Marshall

Geoffrey Marshall is a Fellow of the Queen's College, Oxford.



A still from a 1926 film *By the Law* directed by Lev Kuleshov, taken from *Kino: a history of the Russian and Soviet film* by Jay Leyda (Allen & Unwin, £7.95).

Insights into crime

Crime in Seventeenth-Century England: a county study
by J. A. Sharpe
Cambridge University Press, £25.00
ISBN 0 521 25074 9

Although the history of crime is not in itself an absolutely new development, it would be true to say that it is only comparatively recently that it has begun to emancipate itself from older antiquarian, impressionistic, heavily literary approaches. Modern research has concentrated on the social history of crime rather than on the administrative history of the criminal law, and has been connected (by the Marxists) with the process of class formation and examined by others through concentration on specific offences or specific localities. Even so, the definition of crime - invariably as much a social as a purely legal question - remains the supreme problem. The relationship between the theory and practice of the law follows not far behind. The history of crime remains fraught with methodological difficulties.

Dr Sharpe's book on Essex in the years 1680 to 1689 is a pioneering study of crime in an English county. It is well organized and written, logically argued, is constantly questioning in approach, and aware of the inadequacies and pitfalls of the available evidence. Though quantification necessarily forms part of Sharpe's treatment he is honest enough to admit its limitations. His stance is independent and calls into question, for example, generalizations made by Brian Manning for upper-class encouragement of popular disturbances in the period 1640-2 and Alan Everitt on the lawlessness of forest areas.

Sharpe is quick to expose the frail foundations on which a number of accepted historical orthodoxies rest. The picture of the JP as the ever-active willing spokesman of the Tudor and Stuart regimes, for instance, is shown to be a fiction. Plague and civil war, Sharpe argues, had not previously limited consequences for the law and order in Essex.

R. C. Richardson

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Domestic legal systems

European Human Rights Convention in Domestic Law: a comparative study
by Andrew Z. Drzemczewski
Oxford University Press, £30.00
ISBN 0 19 825396 6

Some dozen years ago a distinguished international lawyer expressed to me his opinion that the European Convention on Human Rights had been shamefully neglected in this country both legal academics and practising lawyers.

My mentor's judgment seemed rather harsh at the time. After all, it was only in 1966 that the United Kingdom conceded the right of individual petition - the very linchpin of the system - whereby complainants may arraign their government before the European Commission of Human Rights. Since then, however, lost time has been made up for. And as the queue of British complainants at Strasbourg grows ever longer the advantages of extending the same level of guarantees at the plane of domestic law have become increasingly apparent.

The argument for domestic incorporation of the text of the European convention is both simple and attractive. In the first place Britain's shortcomings in the human rights field would not be given a public airing before an international tribunal. Second, the vindication of rights which at present occurs belatedly in Strasbourg may be swiftly achieved in the Strand. Here, as in many areas of public law, other countries point the way ahead. Their constitutional rules are such that a duly ratified treaty automatically acquires the force of internal law. In Britain, by contrast, legislative implementation is also necessary and (hitherto, at least) not forthcoming.

Herein lies the importance of Dr Drzemczewski's scholarly book. It is a painstaking study of the relative status of the European convention in the domestic legal systems of each member state of the Council of Europe. The ample footnotes reveal the extent of the reliance placed on secondary sources - surely inevitable, however, in a work which traverses so many legal systems. Special attention is concentrated on three areas of municipal law: the application of the convention in private disputes; opposition to individual state courts of the authority in domestic courts of the authority in domestic courts of the authority in domestic courts.

Sharpe finds property offences to be the largest single category of crime, though the number of cases declined as the period wore on; in other respects Essex was impressive by law-abiding standards. He emphasizes that the resident poor of parishes were more of a problem than vagrants by this period, and he has interesting things to say about the criminal potential of alehouses and servants, about the role of informers and about the insecurity of prisons. Unlike the Marxists he is impressed by the flexibility - and frequent humanity - with which the law was operated, and sees the increased vigilance and heavier sentences of the 1620s and early 1630s as a nervous reaction to a period of economic and social crisis.

Some of the statements made, it is true - about the social status of churchwardens, for example - seem doubtful. There are a few shabby generalizations and solemn statements of the obvious and some vaguely embarrassing excursions into social psychology. He says too little both about the effects of puritanism and, Essex's links with London. Above all, the author's approach is at times too static and descriptive. But like any good historical study this one raises questions as well, as answers them and invites the reader to consider, for example, the controlling shaping attitudes to crime and to law why clemency should have been the line taken on many occasions by the authorities.

Joseph Jaconelli

Joseph Jaconelli is senior lecturer in law at the University of Manchester.

BOOKS

BIOLOGICAL SCIENCES

Cultural evolution

Human Culture: a moment in evolution
by Theodosius Dobzhansky and Ernest Boesiger
edited and completed by Bruce Wallace
Columbia University Press, \$24.50
ISBN 0 231 05632 X

Theodosius Dobzhansky and Ernest Boesiger, two eminent biologists united by a close friendship as well as by shared interests in evolutionary biology, both died in 1975. Only months previously, Dobzhansky had delivered a series of lectures to the Collège de France on the theme of the relationship between biological and cultural evolution. Boesiger was involved in this from the outset, notably in translating Dobzhansky's lecture texts into French, and the two friends had agreed to produce a joint book combining the lectures with additional chapters written by Boesiger.

Madame Boesiger arranged for Bruce Wallace (once a Dobzhansky student) to complete the unfinished manuscript, involving the translation of Boesiger's two chapters and the addition of a first and last chapter. The fact that Wallace has carried out this somewhat daunting task impeccably should earn him the lasting gratitude of the biological community, as the final product is a very readable, thought-provoking series of succinct essays on some theoretical issues surrounding man's emergence from the animal kingdom, rendered all the more delightful by Hans Ertel's illustrations.

Although the main part of this splendid book dates back to eight years ago, any fears that the material might prove to be outdated are unjustified, firstly because the essays written by Dobzhansky and Boesiger are timeless and penetrating evolutionary back-ground issues and secondly because of Wallace's additions. Indeed, Wallace has to some extent usurped the reviewer's role by incorporating a number of critical (but scrupulously fair) comments on the original material. In particular, he admits to feeling somewhat ill-at-ease in dealing with Dobzhansky's treatments of such thorny philosophical problems as teleology, self-awareness and ethics, although he enthusiastically defends Boesiger's chapter on the possible evolutionary background to aesthetics. It should be noted, however, that Dobzhansky broaches these thorny issues with a steady eye on his own comprehensive grasp of genetics, and it is perhaps because they are brought too close for comfort that his chapters are likely to unsettle a laboratory-based geneticist such as Wallace. Boesiger's chapters seem comparatively safe since they do not explicitly explore biological foundations into genetics; but for this very reason others might view them as rather less satisfactory.

Both Boesiger and Dobzhansky constructed their chapters around the central tenet that human biology and culture are inseparably linked. Boesiger writes of a feedback relationship between biology and culture and Dobzhansky makes the point even more forcibly by stating that both are part of a single cybernetic system. Both authors reject the alternative extremes of crude genetic determinism and blinkered *tabula rasa* thinking and try instead to explore the interaction between biology and culture in human evolution. Wallace is entirely in tune with this integrative approach and provides some of the most entertaining examples.

The great strength of this book, almost in inverse proportion to its small size, lies in its concise treatment of major theoretical issues with a clarity of expression rarely equalled in similar books. Specialists can still read it with profit, while rank outsiders can appreciate and stimulating. Dobzhansky shows particular skill in presenting the authorial weight of scientific authority, trenchant summaries of controversial topics, including the role of chance in evolution, "non-Darwinian" theories of evolution, the genetic basis of

basis for ethics. He clears up many widespread misunderstandings while at the same time striving for a balanced presentation.

It is, for instance, important to realise that the chance element in evolution is confined to the origin of mutations and fortuitous combinations of environmental influences. Natural selection itself is not a chance process but a very systematic influence that may in some cases be likened to a sieve and has been aptly described as " tinkering " by François Jacob. It is equally important to realise that natural selection acts on organisms, not on individual genes, and that if the organism is embedded in its own cultural framework then this will also be involved in the context of selection. Dobzhansky performs a useful service in providing a clear outline of the thinking behind the concept of neutral mutation underlying many attempts to construct "molecular clocks" of evolution and follows this with a masterly statement of the evolutionary implications of the finding that the incidence of genetic polymorphism (the existence of alternative forms of individual genes in a given population) is far greater than was originally expected.

Another high point is Dobzhansky's discussion of genetics and IQ, which cuts through much of the fog around the issue by establishing that "heritability" is a relative concept with an environmental component and by denouncing inter-individual differences from inter-group differences (the latter being almost imperceptible to any clear genetic interpretation). Here, however, Dobzhansky makes a rare logical slip in suggesting that genetic similarity may evoke similar treatment from other people, thus playing a part in apparent cultural contributions to "intelligence". Wallace neatly exposes the fallacy behind this line of thinking in his prefatory remarks.

Future authors in this area would do well to heed Boesiger's words: "For an adequate comprehension of hominization, the relation between biological evolution and cultural evolution must be discussed."

R. D. Martin

R. D. Martin is professor of physical anthropology at University College, London.

Vital barrier

Skin
by P. F. Millington and R. Wilkinson
Cambridge University Press, £35.00
ISBN 0 521 24122 7

Skin is a much underrated structure. Although biologists and physicians have been attracted by the drama of the heart and brain, they have not given skin the attention it deserves. This general attitude has percolated through to the undergraduate medical curriculum in which teaching about skin disease is notable only for its virtual absence.

Yet there is an increasing realization of the importance of a healthy integument to our general wellbeing.



Screaming, Jackie holds out a hand in a begging gesture to another chimpanzee who has taken his berries. He wants them back. Illustration taken from *Chimpanzee Politics: power and sex among apes* by Frans de Waal, published by Unwin Paperbacks at £3.95.

Its dual role as an organ of communication and as a vital guardian of the internal environment against assaults from the environment are becoming more generally recognized.

In their preface, Millington and Wilkinson rightly state that "to choose the title 'skin' is in one sense presumptuous, in another challenging". However, this book is in no sense a compendium of skin biology, as it provides a relatively short commentary on the structure and function of normal human skin and a somewhat longer and more detailed consideration of its physical properties. There is also one section devoted to the effects of certain environmental influences on the skin and a final chapter on wound closure, dressing materials and skin substitutes.

Because of this diversity of topics, however, it is difficult to know which professional group will want to read it. I can certainly recommend the chapters introducing mechanical, thermal and electrical properties to undergraduates; postgraduate students should read the opening chapter on the skin surface as I do not know of a better summary; and the final chapter on dressings and methods of wound closure collate a great deal of very useful information which is difficult to obtain elsewhere.

Some topics have not fared so well. For example, in a short inadequate section on "epidermal growth", the authors restrict their discussion of techniques to out-of-date ones measuring mitotic index. Similarly, the lengthy discussion of changes in both inappropriate and misleading, the authors incorrectly implying that the role of these chemical messengers in the control of mitosis is "largely accepted". There are also several inaccuracies in the section on Langerhans cells.

Finally, although I would concede that a book about some facet of human biology needs to mention particular diseases to illustrate par-

ticular points, these must be appropriate and accurately quoted. For example, Epidermolysis bullosa is considered as a single disorder "where lesions occur within the lamina of the junction" (page 62), rather than a complex of diseases with a variety of pathologies; the discussion of the degeneration of elastic fibres is confusing; and in the section on mechanical properties, some less esoteric examples might have been more helpful.

Ronald Marks

Ronald Marks is professor of dermatology at the Welsh National School of Medicine, Cardiff.

Botanical constraints

Plant Reproductive Ecology
by Mary F. Willson
Wiley, £33.25
ISBN 0 471 08362 3

In her evolutionary approach to those aspects of the life history of plants involved with reproduction, Mary Willson has interpreted the term broadly to include almost all phases of life cycles from the vegetative period which precedes reproduction to the dispersal of offspring and the behaviour of dispersed seeds. Her book could equally well have been titled *The Evolutionary Ecology of Plants*. References are made wherever possible to angiosperms, gymnosperms, ferns, bryophytes and algae, but the state of the subject is such that angiosperms are the main focus of attention.

Though intended as a "primer" the book is too speculative for most undergraduate courses. It is also in some

places too telegraphic, as authors are often cited without adequate explanation of their hypotheses. However, each of the book's four chapters - on life histories, sexual systems, mating, and offspring - could stand alone as a review of the topic.

The reader is warned from the beginning that there are many problems in deciding whether or not a particular trait exhibited by a plant - for example the number of seeds in a pod - contributes to Darwinian fitness and in particular whether a particular hypothesis about its evolutionary function is correct ("conclusive proof of anything is generally out of reach"; "much of science proceeds, at least temporarily, along its pathways of investigation without such proofs") - an attitude I would defend.

Willson is enthusiastic about theories, which for the most part she expounds without mathematical formalism. On one occasion, however, her enthusiasm gets the better of her: although we already have an obvious explanation for the phenomenon of self-incompatibility, she regrets being unable to think of a better reason than avoidance of inbreeding to explain its evolution. She is also quite candid about evidence. The enormous variety of traits that plants display is both a challenge and an obstacle to evolutionary explanation. Every rule seems to have its exceptions and the further investigations are carried, the more exceptions there seem to be. Willson's comment on pollination mechanisms could be said of several other topics: "For every species that is constrained by some factor, there is another that has eluded that constraint, and the pressures favouring a certain response in one species but not in another are seldom understood."

This situation is amply illustrated in the theory of reproductive allocation. At one time there was a simple theory which "explained" why annual plants apportioned a large percentage of their biomass to reproduction whereas perennials did not. Willson's comprehensive review of the available data shows quite clearly that the picture is actually much more complicated and that there are trees which behave like "annuals" and there are annuals which behave like "trees", devoting only a small fraction of their biomass to reproductive structures.

Where data are available to match the theory, Willson generally puts the two together but covers too much ground to be able to give topics such as the evolution of sex or the theory of sex allocation the in-depth treatment they receive in the more specialized books on these subjects by John Maynard Smith (Cambridge University Press, 1978) and by E.L. Charnov (Princeton University Press, 1982). Both books are clearly enough written to offer readers a more comprehensive alternative on these particular topics.

Willson's book is like a substantial four-course meal that leaves one inexplicably unsatisfied, the mix of theory and data not being quite right. In fairness, however, this is often the state of the art in ecology and not the fault of the book.

Jonathan Silvertown

Jonathan Silvertown is lecturer in biology at the Open University.

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Wiley, £66.50
ISBN 0 471 05124 1

It seems almost obligatory for any new immunology textbook to contain an introductory sentence explaining how the author has ignored the classical, artificial divisions of immunology, cellular immunology, and so on, and developed a more coherent system. Although these two books are no exception in organizing their material in a novel way, they differ from most of the alternative texts by doing this successfully.

Clark aims to convey an understanding of the fundamental principles of modern immunology by presenting his experimental basis. To this end he rightly omits certain topics (for example, network theory and tumour immunology). Klein has no such model aspirations, and in a much larger text covers the subject comprehensively.

Clark gives a brief informative introduction to the concept of immunology and then describes the structures of the immune system, immunoglobulins, and the relevant cell types and subpopulations. He then looks at how these function in an immune response, including three clinically oriented chapters on immunity to infection, immunological injury (hypersensitivity and autoimmunity), and transplantation. To his credit, he discusses innate or "non-immunological" defences to infection, which, though probably more important to the body than immune responses, are usually ignored by immunologists.

Complex and rapidly developing topics such as immunoglobulin genes and histocompatibility systems are presented in a well-organized and comprehensible manner; and the brief history given should help readers to understand the subject's development and hence to view other literature in perspective. However, although each chosen topic is well covered, an overall unifying description is lacking — a common fault with immunology textbooks. Consequently it is difficult to grasp the basis of how the immune system works. The glossary of immunological terms, however, is undoubtedly a major strength in an introductory text on a subject so bedevilled with jargon.

Klein organizes his treatise into four parts: an introductory definition of the subject, including its history; a structural description of the components from the whole organism inwards; the functional reactions of the components, including their interactions; and finally an integrated view of the complex processes involved in defending the body. This works well as the book is intended to be read from cover to cover. In arguing how important are the immune responses, Klein uses beautiful, as well as helpful, illustrations throughout the text to emphasize his point. Besides being a solid reference text, the book is a work of art and philosophy.

Though comprehensive, the book should be accessible to both novices and experienced immunologists. It is never boring and is enlivened throughout by historical anecdotes and instructive analogies. Klein manages to distil a few paragraphs of complex solid facts and some incisive comments from many years of experimental confusion. Most chapters have appendices to cover the potential weaknesses in readers' backgrounds. What other immunology textbook includes the composition of the oxygen atom's electron cloud and the principles of amino acid sequencing and peptide cloning? The book concludes with a refreshing evaluation of current and future immunological research. As Klein is an established expert, this is often very interesting and sometimes amusingly cynical.

Both books have been well organized and are well written, such that they accomplish their own, different, goals. And they are as up-to-date as publication dates allow. Both authors are careful to differentiate between established fact and current dogma, although I prefer Klein's somewhat more sceptical views on some points. Clark's book will be very useful to immunology teachers and to non-undergraduates. Although Klein's book is very expensive, it should become a standard reference and prove an enormous asset to any departmental library involved in immunology teaching.

Jan Klein's comment in his preface about being afraid of his students asking questions outside his speciality will strike a sympathetic chord in most lecturers who teach immunology courses. Both authors say writing their books helped their teaching. Fortunately for the rest of us who are afraid of our students we need do nothing as arduous — we can gratefully read theirs.

Alan Johnstone

Alan Johnstone is lecturer in immunology at St George's Hospital Medical School, London.

Ideas about sex

Gametes and Spores: Ideas about sexual reproduction 1750-1914
by John Farley
Johns Hopkins University Press,
\$19.50
ISBN 0 8018 2738 8

Why should organisms reproduce sexually when many of them — plants in particular — do it better by themselves and demonstrate a breathtaking capacity to go forth and multiply through entirely asexual means? The conventional scientific answer rests on genetics and the necessity for all species to include some kind of sexual conjugation during an individual lifespan in order to vary the relations of chromosomes. Without sex there is no random re-assortment of genes; without a fluctuating gene pool there is no variation in living beings; without variation there is absolutely no chance of adaptation and thence evolution. However unromantic it sounds, twentieth-century geneticists seemingly have the problem all sewn up.

But that is no reason to ignore the fascination that such a topic has exerted in previous eras. Sex as a biological function has intrigued and perplexed scientific thinkers ever since the existence of sperm and egg were first confirmed during the second half of the seventeenth century, and has stimulated a whole series of absorbing researches into the anatomy and physiology of reproduction. It is John Farley's purpose in this interesting study to describe just about every development in the field from 1750 through to 1914, the year when our ideas about (biological) sex more or less solidified into the form they remain in today.

Farley has realised that a history of ideas about the asexual life of mosses and liver flukes is essential to set the history of sexual reproduction in its proper context, and he charts the relative rise of interest in first one, and then the other, while knowledge about the complex life cycles of the lower plants and invertebrates was plucked, as it were, from an indigenous mother-Nature.

Not an easy read for the amateur, the text is peppered with technical discussions of changing concepts of fertilization, the actual role of sperm, and most significantly, excellent detailed accounts of the phenomena of life without sex or, more confusingly, life with both methods of reproduction, as exhibited by mosses and ferns. These organisms produce spores in the first instance that grow into adult plants unlike the original. That "second generation" reproduces sexually, via gametes, to create another recognizable moss or fern. Linnaeus called such oddities the Cryptogamia — plants that hide their sexual organs. Farley also makes a valiant attempt to link some of these shifting concepts into a larger history of ideas about human sexuality. In a central chapter he describes how much illustration the antiseptic use of late Victorian times, and, by juxtaposition, suggests that as human sexuality went underground, scientists glorified what they thought to be the infinite possibilities of asexual reproduction in the non-human world. For the Victorians, it seems, procreation was essentially non-sexual, where female eggs were seen as just another product of ordinary cellular activity. On the face of it, this is an appealing argument but perhaps should not be taken too seriously. The time span, moreover, seems a little confused, for so exceedingly high-flown sentiments were really only characteristic of the 1880s onwards, and Farley's "decline of sex" counter-balanced by an "asexual progression" are located in the middle third of the nineteenth century.

In essence, however, this is a book about animals and plants, not humans, and the lower animals are plants at that. Farley is obviously enchanted by the lush, cryptic life cycles of ferns, by the reproductive production-line of the jellyfish. Modern cytologists may indeed have all the answers, as he argues here, but how much more tantalizing are the green and liquid world of a mossy bank, the intricate delights of invertebrate sex.

Janet Browne

Janet Browne is a member of the Unit of the History of Medicine, Department of Anatomy and Embryology, University College London.

Useful bacteria

Methylotrophy and Methanogenesis by Peter J. Lars

Van Nostrand Reinhold, £4.75
ISBN 0 442 30528 3

Methylotrophy is the way of life of methylotrophs — microbes able to grow on compounds such as methane and methanol as their sole source of carbon and energy. Methanogenesis is the "opposite" biological process of methane synthesis catalyzed by a completely unrelated group of primitive bacteria called the methanogens. Dr Lars's small book (88 pages) is a succinct account of the remarkable biological and biochemical diversity within these two groups of organisms. A valuable introduction to the biology and ecology of microorganisms is followed by a chapter on the physiology of the ends of each chapter and the excellent choice of a readily available references, all readily available references.

Christopher Anthony

Christopher Anthony is reader in biochemistry at the University of Southampton.

BOOKS

BIOLOGICAL SCIENCES

Nature's oddities

Hen's Teeth and Horse's Toes: further reflections in natural history by Stephen Jay Gould
Norton, £11.95
ISBN 0 393 01716 8

Many a human invention is modelled on an observation of nature. But not the wheel. Animals must maintain connections between their parts. Physical rupture of nerves and blood vessels supplying the rim apparently precludes the evolution of wheels. Actually, we could imagine circumstances under which wheels might evolve, but that would mean extruding from our world to that of a bacterium. We had better learn to do just that because bacteria have wheels. "In fact, at this very moment, wheels are rotating by the millions in your own gut" writes Stephen Jay Gould with reference to the flagella of *Escherichia coli*.

Gould's love for nature's oddities coupled with his ability to turn oddities into beautifully composed parables makes him my favourite science writer. This further collection of absorbing essays is full of accounts both weird and wonderful — of tiny male fish that parasitize their mates, for we all know that males are larger than females; of hen's teeth, for we all know that hens don't have teeth; of the testes of female hyaenas; and so forth.

Gould manages to communicate scientific controversies in a way that makes us wonder what the brouhaha (his favourite word) is all about. For example, in the practice of taxonomy, the loud and contentious debate between pheneticists and cladists, and between cladists and transformed cladists (or "lapsed cladists"), has created a terrible jargon and much confusion. In an essay entitled "What, if anything, is a zebra?", Gould crystallizes most of what is worth saying into a short essay that can be enjoyed and understood at first reading by anyone with a knowledge of O level biology. It is all based on the fact that there are three species of zebra, and the horse may be a more recent common ancestor of one of these than are the other two species of zebra. Zebras may not, therefore, form a monophyletic or unified evolutionary group. In one sense, then, zebras may not exist. Nor may fishes. It's terrible, but we shall have to live with it.

There is, however, a danger associated with this ability to communicate scientific controversy and it is evident in his treatment of so-called levels of evolutionary change. Gould is firmly entrenched on one side of that controversy. As a consequence, the essay is biased. His own crusading spirit has got the better of him. The essay is nominally about the role of random factors in evolution, but it is used as a vehicle to promote a view that there are three different levels of evolutionary change: gene frequency change, the origin of species, and species selection. That is the perspective, but within at least two of those categories the role of chance is exaggerated.

Frequency-dependent selection, where rare forms are favoured, is probably the most potent selective force maintaining variation in populations. It is ignored in this essay, and the classical force of heterosis (in which offspring of genetically different parents are favoured) is set up as a straw man to contrast on to assigned factors. The essay would do a far more important role to sympatric speciation (the origin of species without geographical isolation) than the current evidence suggests. Taken together, these factors not only attract to chance an inordinate role but they also emphasize the establishment of categories that are merely convenient points along a continuum. This is because the "random" factors are claimed to operate in different ways at the different levels of evolutionary change, whereas natural selection has its most potent influence when setting among individuals within populations. Gould's ability as a scientist or investigative journalist, as well as a science writer, is also evident. When he thinks something through, he gets to the core of the issue and is likely to go out and do something about it. Two examples come to mind. The first is the role of Teilhard de Chardin in perpetrating the Piltown hoax. Here, Gould has uncovered the only pieces of evidence in favour of the theory that Teilhard was implicated, and then he lays them before his reader as an advocate for the prosecution. Many of us had suspected Teilhard, but no one had sought the evidence. The critics have replied and they are answered in another essay.

A second example of Gould's active investigations concerns a cold oyster. The shell of this oyster, the story went, became more coiled over evolutionary time so that eventually its tip came round to its base, and it could no longer open its shell. The species, therefore, went extinct "imprisoned in its own embrace". The evidence for this controversial claim, first made in 1922, was based on a single specimen in the British Museum. Gould examined the specimen and was able to prove that the tip of the shell that seemed to press hard on the valve to prevent opening was, in fact, a lump of mud. No one had thought to check the type specimen. Indeed, part of the attraction of Gould's writing is that he makes everything seem so deceptively obvious.

Paul Harvey

Paul Harvey is lecturer in biological sciences at the University of Sussex.

Uncharted territory

Exploration in Animals and Humans edited by John Archer and Lynda Birke

Van Nostrand Reinhold, £16.95
ISBN 0 442 30527 3

Exploration remains a neglected topic within the behavioural sciences, certainly in comparison with, for example, hunger, thirst and sex. The editors argue in their introductory chapter, this welcome collection of papers that exploration has had to make do in the past with ill-fitted theories such as drive-reduction theory, inherited from grander branches of psychology, and with ill-suited techniques, such as the placing of rats in totally strange, empty arenas, and that it has suffered as a result. The way forward, they write, "is no longer to pursue the bored laboratory rat down an endless maze". So that we are left in no doubt that drive-reduction theory is out now.

Nell Chalmers

Nell Chalmers is senior lecturer in biology at the Open University.

Nitrogen cycle

Nitrogen Metabolism in Plants

by C.M. Bray

Longman, £7.95

ISBN 0 582 44640 6

The subject of nitrogen metabolism in plants is prodigious. It is difficult, therefore, in a small book to convey in a balanced and sufficiently condensed manner an accurate and selectively wide-ranging treatment at a level appropriate to good undergraduate students of various origins. However, Dr Bray has succeeded commendably in meeting these needs in a readable and intrinsically stimulating text. The first and last chapters deal in a fairly general way with processes of nitrogen fixation, nitrate and nitrite reduction, incorporation of ammonia to form glutamate, some bacteria, and the transport and interconversions of plant nitrogen compounds during growth, seed formation and senescence. These two chapters need to be read together before an intensive study of the rest of the text.

The remaining five specialized chapters are excellent. The structure, biosynthesis and metabolism of the twenty amino acids are first clearly described and illustrated, and the important regulatory aspects and branched pathways of their conversions are discussed. The chapter on nitrogen distribution then shows how several diverse classes of nitrogenous compounds can be derived from the basic amino acids. Here, although the biochemical minutiae of NAD(P) co-

zymes, cyanogens, ethylene, many amines, alkaloids, and the tetrapyrrole structure of the haem and chlorophyll molecules are important examples, the author might also have mentioned the two polyamines, spermidine and spermine, because of their likely role in nucleic acid function and membrane behaviour; the naturally occurring hormones of barley seedlings (which are derived from agmatine) as examples of phenolic anionic conjugates; and the importance of phytochrome for metabolism.

The penultimate two chapters provide a valuable link between the nucleic acids and protein synthesis — the processes of DNA replication, base pairing in the double helix, differences between nuclear, chloroplast and mitochondrial DNAs, the composition of chromatin and the structure of the nucleosome being clearly explained. The different types of RNA (messenger, transfer, ribosomal) and their functions, the roles of the different RNA polymerases and the genetic code of base triplets are also described, with good illustrations. Finally, protein synthesis and related processes are considered.

This concise and well illustrated text, with its useful guides to further reading, should be essential for most undergraduates reading plant biology and general biochemistry. It might also appeal to some good sixth-form students.

E. J. Hewitt

E. J. Hewitt is head of the biochemistry group in the plant sciences division of the ARC's Long Ashton Research Station, near Bristol, and reader in plant physiology at the University of Bristol.

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Appointees should have a PhD or equivalent qualification and should have experience in the field of pharmaceutical technology. The successful candidate will be responsible for the overall management of the department and its students.

Appointees should submit a curriculum vitae, a list of references, and a copy of their application to the Association of Commonwealth Universities (ACU), 36 Gordon Square, London WC1H 0PF, from whom further particulars are available.

Closing date for receipt of applications is 28 November 1983.

Universities continued



PROFESSOR OF POLYMER TECHNOLOGY

Applications are invited for the post of Professor of Polymer Technology in the University of Loughborough. The successful candidate will be responsible for teaching and research in the field of polymer technology.

Appointees should have a PhD or equivalent qualification and should have experience in the field of polymer technology. The successful candidate will be responsible for the overall management of the department and its students.

Appointees should submit a curriculum vitae, a list of references, and a copy of their application to the Association of Commonwealth Universities (ACU), 36 Gordon Square, London WC1H 0PF, from whom further particulars are available.

Closing date for receipt of applications is 28 November 1983.

University of London

Imperial College of Science and Technology

DEPARTMENTAL ADMINISTRATOR

Departmental Administrator required to direct and co-ordinate administrative and technical services of the Department of Mechanical Engineering.

Applicants should be in the age range 30-55 with a degree preferably in engineering and have relevant experience.

Salary either in the range £7,498-£12,801 or £12,248-£15,311 including London Allowance according to qualifications and experience.

Further particulars and application forms available from the Personnel Secretary, Imperial College, London SW7 2BZ. (Tel: 01-589 5111, Ext. 200). Closing date for applications 28th October, 1983.

University of Strathclyde

CHAIR OF APPLIED GEOLOGY

The University invites applications for the Chair of Applied Geology. The successful candidate will be responsible for teaching and research in the field of applied geology.

Appointees should have a PhD or equivalent qualification and should have experience in the field of applied geology. The successful candidate will be responsible for the overall management of the department and its students.

Appointees should submit a curriculum vitae, a list of references, and a copy of their application to the Association of Commonwealth Universities (ACU), 36 Gordon Square, London WC1H 0PF, from whom further particulars are available.

Closing date for receipt of applications is 28 November 1983.

University of Sydney

SENIOR LECTURER

This Senior Lectureship is in the field of research in the Department of Applied Geology. The successful candidate will be responsible for teaching and research in the field of applied geology.

Appointees should have a PhD or equivalent qualification and should have experience in the field of applied geology. The successful candidate will be responsible for the overall management of the department and its students.

Appointees should submit a curriculum vitae, a list of references, and a copy of their application to the Association of Commonwealth Universities (ACU), 36 Gordon Square, London WC1H 0PF, from whom further particulars are available.

Closing date for receipt of applications is 28 November 1983.

University of North Wales

Chair of Applied Geology

The University invites applications for the Chair of Applied Geology. The successful candidate will be responsible for teaching and research in the field of applied geology.

Appointees should have a PhD or equivalent qualification and should have experience in the field of applied geology. The successful candidate will be responsible for the overall management of the department and its students.

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Closing date for receipt of applications is 28 November 1983.

National University of Lesotho

LECTURERS / SENIOR LECTURERS

Applications are invited for the posts of Lecturers and Senior Lecturers in the Department of Education. The successful candidate will be responsible for teaching and research in the field of education.

Appointees should have a PhD or equivalent qualification and should have experience in the field of education. The successful candidate will be responsible for the overall management of the department and its students.

Appointees should submit a curriculum vitae, a list of references, and a copy of their application to the Association of Commonwealth Universities (ACU), 36 Gordon Square, London WC1H 0PF, from whom further particulars are available.

Closing date for receipt of applications is 28 November 1983.

University of Cambridge

Two Research Fellowships

Applications are invited for two Research Fellowships in the Department of Education. The successful candidate will be responsible for teaching and research in the field of education.

Appointees should have a PhD or equivalent qualification and should have experience in the field of education. The successful candidate will be responsible for the overall management of the department and its students.

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Closing date for receipt of applications is 28 November

Overseas, continued

NGEE ANN POLYTECHNIC Republic of Singapore

Invites applications from suitably qualified persons for appointment as Lecturing Staff in the following Departments/Centres:

- Building
- Electrical and Electronic Engineering
- Mechanical Engineering
- Shipbuilding and Repair Technology
- Mathematics and Science

The Institution

Ngee Ann Polytechnic is a premier Government Polytechnic offering diploma courses equivalent to HND standard. The Polytechnic has a student enrolment of 4,800 and a full-time academic staff strength of 308 in the current academic year. The student population is expected to increase to 9,000 by 1986 with a proportionate increase in staff strength. The current annual operating budget of \$16.5m is expected to be increased to \$70m. The medium of instruction is English.

Qualifications

Candidates must have a good and recognised University Degree and/or professional qualifications in a relevant field and have at least two years relevant industrial/teaching experience. However, preference will be given to candidates with experience/expertise in the following areas:

a) Building

Electrical Engineering, Building Services and Environmental Engineering.

b) Electrical and Electronic Engineering

- (1) Power & Industrial Electronics
- (2) Telecommunication (Digital Communication & Microwave Technology)
- (3) Computer Control & Instrumentation
- (4) Robotics & Automation
- (5) Computer/Microprocessor Technology & Application
- (6) Electronic Measurement

c) Mechanical Engineering

- (1) Computerised Machining
- (2) Robotics
- (3) CAD/CAM
- (4) Instrumentation & Control
- (5) Refrigeration & Air-Conditioning
- (6) Computer Application
- (7) Engineering System Design

d) Shipbuilding and Repair Technology

Towing Tanks, Offshore Engineering, Shipbuilding/Ship Design and Marine Electro-technology.

e) Mathematics and Science

Professional computer experience together with experience in teaching and research in Computer Science.

Gross Annual Emoluments

Gross Annual Emoluments range from S\$27,113-S\$94,828.
(The present rate of exchange is £1 = S\$3.23)

The above figures include a current 13-month allowance and a 22% employer's contribution to the Singapore Central Provident Fund.

The levels of appointment and points of entry into the above salary range will be dependent upon qualifications and experience. Applicants need only apply for a Lecturing Appointment, giving details of qualifications and experience, and the Polytechnic will decide on final offer after interview.

Terms and Conditions of Service

Singaporeans and Malaysians will be offered appointments on local terms. Other successful candidates will be appointed on contract of three years' duration. Successful applicants will also be eligible for medical/dental benefits, membership of Central Provident Fund, free air passages for employee, wife and children, children's education allowance, housing allowance, commuted board and lodging allowance, baggage allowance, etc. Applicants will be supplied with details of terms and conditions of service if they are shortlisted for interview.

Applications

For application forms, please write to the address shown below enclosing a stamped self-addressed envelope or call personally to the:

Singapore High Commission, 5 Cheesem Street,
London SW1, United Kingdom.

Applications close on 10 days after advertisement.

DEPARTMENT OF Germanic Languages, University of Alberta, Canada, is recruiting for a postdoctoral research fellowships with assistance from the University of Alberta Library and the Department of Germanic Languages.

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DEAKIN UNIVERSITY GEELONG

Postdoctoral Research Fellowships

Deakin University offers postdoctoral research fellowships for full-time research in any School of the University. Applicants should have Australian permanent residency status, be eligible for admission to the degree of Doctor of Philosophy or have at least equivalent postgraduate research experience, and have completed their last postgraduate degree not more than five years prior to application.

Fellowships are normally tenable for two years with a review after the first year and the possibility of an extension to a third year.

The salary will be at Senior Tutor level 1 in the first year (currently \$19,335) and at Senior Tutor level 2 in the second year (currently \$21,859).

Applications close 31 October.

Enquiries and applications should be directed to: Registrar, Deakin University, Victoria 3217.

STATE OF KUWAIT

University of Kuwait

University of Kuwait invites applications for the posts of Professors, Assistant Professors and Lecturers, for the academic year 1984/85 tenable for 1st September 1984, to the following disciplines:

1 FACULTY OF SCIENCE

- Mathematics Department: Computer Science, Numerical Analysis, Statistics, Electronics, Atomic Physics, Molecular Physics, Theoretical Physics.
- Physics Department: Biochemical Genetics or Enzymology. (Visiting Professor for a contract of one or two years).
- Biochemistry Department: Microbial Physiology, Microbial Ecology, Plant Taxonomy of Flowering Plants, Paleobotany.
- Botany and Microbiology Department: Genetics, Desert Ecology, Comparative Animal Physiology, General Zoology.
- Zoology Department: Geophysics-Tectonics, Crystallography Mineralogist, Metamorphic Petrologist, Isotope Geochemistry.
- Geology Department: Literature and Criticism, Grammar and Morphology.

2 FACULTY OF ARTS

- Arabic Language & Literature Department: History of the Ancient Near East, History of Africa, History of Arab Islamic Civilization.
- History Department: Islamic Philosophy.
- Philosophy Department: Organizational Psych., Experimental Psych., Physiological Psych., Counselling (especially with family), Learnings, Psycholinguistics.
- Psychology Department: Cultural Anthropology, Pre-Historic Archaeology, Physical Anthropology, All Fields of Sociology, All Fields of Social Work.
- Sociology & Social Work Department: Civil Law, Comparative Law.

3 FACULTY OF LAW

- Private Law Department: Public International Law, Private International Law.
- International Law Department: Al Fiqh.

4 FACULTY OF SHARI'A AND ISLAMIC STUDIES

- Fiqh and Usul al Fiqh Department: Tafsir, Hadeeth.
- Tafsir and Hadeeth Department: Aqeedah, Daa'wah.
- Aqeedah and Daa'wah Department: Fiqh Muqaran & Seyasah Shara'iah, Fiqh Muqaran.
- Fiqh Muqaran & Seyasah Shara'iah Department: Accounting, Information Systems, Accounting Theory, Financial Accounting, Advanced Accounting.

5 FACULTY OF COMMERCE, ECONOMICS & POLITICAL SCIENCE

- Accounting and Auditing Department: Marketing, Finance, Organization and Personnel, Industrial Management.
- Business Administration Department: (Lecturer or Asst. Prof.) Economic History (Econ. Thought), Economic Theory (Welfare Economics).
- Economics Department: Political Science Department: Political Research Methodology, Comparative Politics, International Relations, Political Ideology.
- Statistics and Insurance Department: Applied Statistics, Computer (Preferable Statistical Computing), Insurance.
- Public Administration Department: Public Administration.

6 FACULTY OF ENGINEERING & PETROLEUM

- Civil Engineering Department: Sanitary Environmental Engineering, Construction Management.
- Electrical Engineering Department: (Asst. Prof. or Prof.) Energy Sources & Systems, Computer Engineering & Digital Systems, Signal Processing & Communication Systems, Control & Systems Theory, Electronic Circuits and Devices.
- Mechanical Engineering Department: (Asst. Prof. or Prof.) Thermal-Fluid Sciences, Steam and Gas Turbines, Refrigeration and Air-conditioning, and related subjects.
- Chemical Engineering Department: (Asst. Prof. or Prof.) Kinetics, Reactor Design and Catalysis, Adsorption and Ion Exchange, Corrosion and Electrochemical Engineering, Desalination, Natural Gas Processing, Air and Water Pollution, Multicomponent Distillation with Industrial Experience in Petroleum Refining.

7 FACULTY OF EDUCATION

- Foundations of Education Department: Kindergarten and Elementary Education.
- Curriculum & Instruction Department: Curriculum & Instruction (Arabic Language and Children Literature), Educational Technology.

- All applicants must hold Ph.D. Degree or its equivalent.
- English is the medium of instruction in the Faculties of Science and Engineering & Petroleum for the other subjects will be in Arabic.
- Method of teaching at Kuwait University is based on the credit hour system.

Applications should be submitted not later than 28th December, 1983, on the application forms which can be obtained from Cultural Attache Offices, Kuwait Embassies in London or in Washington.

Salaries classified

Professor: KD 1,070/- -- KD 1,230/-
Assistant Professor: KD 875/- -- KD 1,035/-
Lecturer: KD 680/- -- KD 840/-

Occupational allowance will be given to Professor (KD 105/-), Assistant Professor (KD 87/-) and Lecturer (KD 44/-) only for Faculty of Engineering.

Present exchange rate for 1 KD = 22.29; \$3.40 approx.

Benefits: Annual air passage for the successful, his wife and up to three children below 20 years. Children's tuition allowances up to Secondary School level in accordance with University regulations. One month basic salary, gratuity at the end of the contract for each year served. Summer and mid-semester paid leaves.

Application together with a copy non-refundable of the academic qualifications and the candidate's curriculum should be sent by registered post directly to the Department of Administrative Affairs, Kuwait University, P.O. Box 5969, Kuwait, not later than 28th December 1983.

THE TIMES SUPPLEMENTS REPRINT SERVICE

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Don's diary

Monday

Flying westwards from Lagos into a tropical sunset is a memorable, colourful and uplifting experience. We are brought down to earth in more ways than one by the seemingly interminable formalities of passport and visa control, exchange control, health control etc. all carried out slowly in a hot, dusty corridor at Kotoka Airport. We then reclaim our baggage which includes such basics as paper, pens, textbooks and many photocopied handouts, because of the limited resources here.

We then see the very welcome sight of the British Council rep and a welcoming party from our hosts, the West African Examinations Council (WAEC). We have been attracted to the attention of large numbers of locals who wish to "help" with luggage, or because "white = rich" in their eyes, ask for cigarettes, money, or try to sell us anything and everything. This entire group then descends on the one customs official who checks baggage. Chaos reigns, but eventually all is sorted out and we reach our hotel before the 10.00pm curfew.

Tuesday

The course begins. It is difficult to convey the contrasts with the UK. The attitude to time is one example. We are picked up by coach at the hotel 40 minutes late, which is regarded by old hands as not bad by African standards. We are taken to the University of Ghana at Legon where much formality and many speeches of welcome mark the official opening of the training session.

We are here to begin a process of localization for commercial education in Ghana to eventually replace the UK examinations which they currently use. The course is to train potential examiners for the WAEC, and over the next two and a half weeks, we are to cover all aspects of examining, besides syllabus development to cover the requirements of Ghana. This can only be a good thing. At the moment, candidates take UK set examinations which are very highly rated here but which are not relevant to their lives in Ghana. For example, questions about hypermarkets and use of credit cards must be meaningless to the students, given the society they live in. The course content and examinations must reflect the needs of the society. A fine aim, but difficult to achieve in practice especially in the current economic crisis.

Much of the first morning is spent checking the credentials of trainees. Eventually, about 15 are excluded having tried to join the course using forged invitations. It would be flattering to think that this was because of the academic content of the course but a more likely explanation is the attraction of the three meals per day the trainees are to receive. In the current crisis, middle class families find great difficulty in obtaining enough food for more than one meal a day.

Wednesday

The trainees from middle management, education and the public sector are extremely keen and enthusiastic. They make strenuous efforts to pronounce their names correctly - to much hilarity. The Ghanians often have forenames based on which day of the week they were born. I discover that, being Saturday born, my day name would be Kwame.

Make good progress. It is most pleasant to have such a committed audience so anxious to learn. They enter the discussions on the syllabus localization with great relish.

There is a lively debate on content - what should be included now and what should be added when technological developments begin to affect the commercial activity in Ghana. It is difficult to break the circle - where teachers have not the experience, books or equipment to explain new developments to students, which in turn slows the development process.

Thursday

All Ghana's universities have been officially closed since mid-May for political reasons. We have, through the lobbying of the WAEC, been given permission to use the school of administration for the training session. The campus is beautiful but shows signs of decay and neglect. There is no money or equipment for repairs and much other equipment is unusable because of the absence of, often minor, spare parts.

The polytechnics in Ghana, being approximately equivalent to our colleges of further education, are still open, but are suffering drastically from a lack of usable technical equipment and books. Even at Legon - the major university of the country - the library stock is totally out of date. The marketing section seems to consist of about half a dozen dated books on advertising in the UK.

When the students occupied the universities in May, calling for a return to democracy, the government's reply was to close all three universities. The result of this is that there have been no final examinations held and consequently no graduates at all in Ghana last session.

If and when they are reopened - negotiations at the moment are only tentative - the first priority will be to complete the last academic session before a new intake can be admitted.

Friday

The trainees show signs of unrest because of their accommodation problems - no running water and very limited sanitation. This is a common problem - our hotel has running water for only about three hours each morning. It is necessary to keep a supply in the bath for use the rest of the day.

The economic crisis is such that the currency is showing signs of collapse. The state set minimum wage of 20 cedis per day, which compares to the take home pay of £200 per week for a middle management accountant, needs to be seen in the light of prices such as a small loaf of bread at £20, eggs at £10 each and the ubiquitous Mars bar at £40. Petrol has doubled to £25 per gallon since April, is rationed to six gallons per week but because of shortages, can involve queuing for up to three days. Exchange rate conversions are quite complex. The official rate is about £4.5 to the £, but following negotiations with the IMF and to obtain foreign currency, it is possible to exchange travel cheques at banks at £4 to the £.

Saturday

The course continues on Saturday morning, 8.30am-12.30pm, following which we are taken to see a performance of the National Folk Dance Company which performs dances from the various regions of the country. It is quite spectacular - an amazing experience.

A tour around Accra follows and we see the utter poverty of many areas. It is extremely sad to see. Although the training course will help the country in the medium and long term, one feels belated in the face of the immediate problems facing the country. The people we meet seem cheerful and welcoming despite all the problems.

Sunday

Early morning jogging before it becomes too hot, followed by a visit to a local church for an interdenominational service. The church is full to overflowing and we hear a sermon on "peace" which seems to be a reply to editors in yesterday's government-controlled newspapers, which had accused the church of not taking sufficient part in the revolutionary process.

All in all, an informed, highly emotive, unstable situation to be in, and we have another lovely day.

Trevor Watkins

The author is principal lecturer in marketing at Sunderland Polytechnic.

Map, compass, emergency rations, strong shoes, hip-flask and whistle - no, the season is over for me, no more walking in the Peak, the Pentlands, or the Snowdon horseshoe, but back to London and the Barbican (when Birkbeck's anti-social hours allow). Regular readers of this column will know what a painful subject this is to me. I've been a regular supporter of the Royal Shakespeare Company ever since they swanned down to London. On the whole it has been pleasure: support is support in my book, not conditional on a string of winners.

I indeed tell the truth (and to refute Benham in passing), the psychology of the true regular is a bit sadomasochistic. We do like to have a go at our own side and some of the victories leave us cold. I'm tottering into the football melior. But I've worked that to death (I thank several correspondents and two old friends).

I'll only say this: that with patience and time (as Papa Kutuzov remarked), or by taking a long view of it, I'm no longer upset that in trying to keep up with my son (that psychologist fellow was quite right) - once deserted Arsenal for QPR - the wheel has turned full circle.

No, just a brief paragraph on my other paradigm of both irrational loyalty and patience and time - as with QPR, the Labour Party is looking up a little at the moment. I was happy to accept the invitation of the "Neil Kinnock campaign" to attend a victory party at the Metropole Hotel, Brighton on last Sunday. ("Cash bar" said the card, and a surprising number of friendly journalists had rejoined the attack or hovered at half-back to buy the drink, always a good sign.)

With a thought of the week (the year and the half decade) ahead of them, there was hardly a mood of mad triumphalism, but there was at least a very pleasant lack of furtiveness among the ever so many who claimed to have helped and to be still fit for another season. It contrasted well with trying to get old pals to admit whether they were still talking to Wxxxxx or Cxxxxxx. Regular supporters and the press seemed to radiate optimism that the new manager is a good thing that has come to the rot. It is the team that needs watching.

Only the night before last I killed up, as I have said, to return to the Barbican to show my painful loyalty. After all, Orwell did not say that a writer could not be a member of a political party, only not "a loyal member" (well, I haven't mentioned him for three months). Indeed I showed quite stupid courage by descending, for the first time, to the Pit, The Pit, of course, the Barbican centre's version of The Space and in Stratford, The Other Space, small and festi-seated.

The seating can even be stripped right out for promenade-style productions (which having such a well-trained

Short, sharp effects down in the pit



Bernard Crick

audience they can attempt without real trouble). Alas, two years ago I saw a good student production turn to chaos because the audience was not used to standing around. Some elderly and infirm relatives actually needed seats and most of us were plainly only able to endure with calmness the uncertainties of student modern theatre if we had the familiar pressure of even an uncomfortable seat against the backside.

It is especially hard to find The Pit; you actually have to cross an underground road with a lot of confused traffic uncertain whether to put down or pick up. I was torn between agoraphobia and claustrophobia, as if at a Tribune rally or on Arsenal's north bank.

Now there are two sorts of things done by both the RSC and the National in their little theatre, and this was very much the other: classical theatre done as chamber music, all very close and intimate and perfect, not the modern disturbed, experimental and crash-through-it stuff. It was, indeed, Moliere's *Tartuffe* itself, said to be the most frequently produced play in the French language, now in what sounded a most plausible and natural translation by Christopher Hampton and produced by Bill Alexander.

Surprisingly it suited a completely open and surrounded acting space. We sat four yards from the well-lit stage at which, for the whole first scene, the family of Orgon discuss his obsession with the hypocrite Tartuffe. The original version of the play as privately performed by Louis XIV in 1664, five years before he agreed to license it, was called *Tartuffe ou l'Hyppocrite*. Tartuffe is called "a hypocrite"

in the RSC cast line although the title given is *Tartuffe or The Impostor*. Beautifully acted and in such chamber conditions, the smallest fudged note rings false: their old ensemble playing at its best, a real bourgeois family at a real meal.

Elmire (Sylvia Corderie) at five says little, but while worried makes patient calm that with time her husband will come to his sense again. Filopete her maid (Sara Blas-Thomas), virtually a member of the family, rattles on pitifully about Tartuffe's treachery, and Cleante, Elmire's brother, makes his famous speeches in favour of moderation, in religion as in all else. Elmire is a *politique* statesman (he would not have liked the revolution of the Edict of Nantes). Sedition has an audience's curiosity less more due to the significant drawing in unit costs between the two sectors, to the obvious damage which would be done to academic standards as unit costs were further reduced, and to the overall reduction in access to higher education underlying the whole exercise.

Now, it seems, our efforts are crowned with magnificent success: having reduced the unit costs and the numbers of students in the sector which is already the cheaper, the Department of Education and Science wishes to send more students to the more expensive sector. This is not just

Enlightened minds. Sir, - Those among your readers who are technologists may have been puzzled by the title given to Professor R. Gregory's article (Mind versus mechanism, *THES*, September 9). They will not have found enlightenment by reading on. At one point we are told, with admirable brevity: "Matter occupies space but mind does not". Yet elsewhere, after a 56-word convoluted sentence, we learn: "(this is) the key to how physical systems may be mind". So physical systems may not occupy space? A new metaphysical concept?

The taboo word "teleology" does not appear in the piece, but makes its disguised appearance as "intention". This leads into a most welcome demolition job on behaviourism which, we are told with great certainty in the shortest sentence, is dead. Unhappily, at the end of the piece paragraph we are informed that: "behaviourism itself is becoming mind-like".

Can Professor Gregory tell us of a single example of a mechanism which has not originated in a mind? The abstract concept of the "specification" is familiar to engineers and architects, and also nowadays to programmers and information technologists (who may use a different name for it). The fact that a specification may also take physical form in drawings, documents and instructions must not obscure its mental basis.

The real problems to which one would hope professors of brain and perception were addressing themselves are these. How can influences lacking location in space, and therefore unable to exercise a force, affect the location in space of physical particles? How can the random and uncontrollable forces and impulses impinging upon living organisms affect the real entities (mindful or not) outside space which relate to them?

These matters received sustained discussion in the writings of the late Professor R. O. Kapp, an eminent electrical engineer, the first of which bore a title remarkably similar to, but more acceptable than, that of Professor Gregory's article, namely *Science versus materialism*. Perhaps Professor Gregory should spend a little more time in the engineering departments and a little less among the life scientists.

Yours faithfully,
D. H. TOMPSETT
2 Kilm Lane,
Leithborough, Northants.

Oxford funds

Sir, - May I refer to an item which appeared in your columns last week about Oxford University and funding? The headline, to the effect that we are "reluctant to raise funds", was grossly misleading. The university is grossly underfunded in the long term, but has been able to raise funds in the last financial year. In addition to numerous benefactions the university secured grants for research totalling nearly £7m. That the university is unable to continue in the future energetically to seek funds from outside sources is evident from your own report.

Yours faithfully,
G. J. WARNOCK
Vice-Chancellor

The author is president of the National Union of Students.

LETTERS TO THE EDITOR

The strange logic of robbing low cost Peter to pay high cost Paul

Sir, - Just what are we supposed to make of the news that additional places should be found in the universities over the next two years simply because the NAB exercise has finally appeared to make two few places available in the public sector? (*THES*, September 30).

Many of us have tried desperately, albeit reluctantly, over the last year to draw up as sensible academic plans as possible within the broad framework of the NAB requirements, while at the same time repeatedly drawing attention to the significant difference in unit costs between the two sectors, to the obvious damage which would be done to academic standards as unit costs were further reduced, and to the overall reduction in access to higher education underlying the whole exercise.

Now, it seems, our efforts are crowned with magnificent success: having reduced the unit costs and the numbers of students in the sector which is already the cheaper, the Department of Education and Science wishes to send more students to the more expensive sector. This is not just

Enlightened minds

Sir, - Your leading article on "non-university" higher education, "Quality or Access?" (*THES*, September 23) poses the question as if the two were mutually exclusive. Both quality and access could be the

case of "robbing Peter to pay Paul" (though it is exactly that except that Peter is already financially poorer than Paul) so much as a clear case of blatant "nabbing" in a way which some of us, obviously naively in retrospect, never really believed was the true purpose or would be the result of the NAB exercise.

If the system as a whole has too few places on offer, surely the obvious logic would be to make more places available in the lower-cost sector from which they were nabbed in the first place. But then, perhaps it is too much to expect logic to prevail when there appears to be so little of it in the places on high that matter.

Yours faithfully,
PETER TOVNE,
Deputy director,
North East London Polytechnic.

Sir, - Your leading article on "non-university" higher education, "Quality or Access?" (*THES*, September 23) poses the question as if the two were mutually exclusive. Both quality and access could be the

HMI reports

Sir, - The practice of publicising Her Majesty's Inspectorate reports is clearly likely to continue in the foreseeable future. The secretary of state seems to value their comments and often selectively quotes from the body of the report.

The report in *The THES* (September 30) of the latest HMI publication *Degree Courses in the Public Sector of Higher Education* should therefore provide him with truthful ground for reflection, coming as it does on the eve of consideration by the National Advisory Body's committee of the latest plans for public sector higher education.

I offer a sample of the quotations from that report. "Occasionally it was observed that financial restrictions were unduly limiting the number of visits made to students and places visited." This point is made in the context of an otherwise good report on the usefulness of industrial training. "It was exceptional to find an en-

Training architects

Sir, - I read with interest your report (*THES*, September 23) that the Architects Registration Council was entering into a dialogue with the NAB/UGC working party on architects' training in response to renewed concern about the place of architects in education. It is to be hoped that debate on these issues does not degenerate into a sterile education v training argument. Schools of architecture are engaged in education and training. The problem is that these two strands have tended to separate, and the education part - academic subjects taught by lectures and seminars ("talking and writing" subjects) - are taught by non-architect specialists with no practical skills or professional design experience, about the place of architecture and leads to better building. A concerted effort will be needed to disseminate the findings of such research throughout the profession. Research and development linked to good quality practice is important for the future of architecture." (*RIBA*, September 1983, p. 50).

These conclusions stem from the fact that despite 15 years or more of research, activity in schools of architecture it is not possible to identify one piece of research which has

YTS successes

Sir, - Much of your article "The YTS" (*THES*, September 9) contains good sensible comment related to the problems of the Youth Training Scheme and its future. It is sad to note, however, that the media in general, and yourselves in particular, seem consistently to publicize the problems but very rarely talk about the successes. Furthermore, you do seem to have a very poor opinion of employers. Comments such as "... it is almost entirely employer-led" implying that employers are looking for cheap labour, give a totally false view.

Employers - especially in the engineering industry with which I am principally concerned, have borne the brunt of the training of young people. In my view, efforts to give very sound training, such as that being undertaken by the Engineering Council, should be encouraged.

Yours faithfully,
G. J. WARNOCK
Vice-Chancellor

more easily secured by a "satellite" or "cooperative" system based, dare I say, on the polytechnics and (a very few) larger institutions which already provide the vast bulk of non-university higher education. Let it also be said that many polytechnics are now multi-site institutions providing both quality and access over a wider geographical area.

There are already in existence up and down the country well documented examples usually under theegis of the Council for National Academic Awards, of cooperative arrangements in higher education between institutions which work well. This provision crosses local authority (and regional?) boundaries and can involve the voluntary colleges and direct grant institutions as well as the "maintained" public sector colleges; in short, it is largely independent of institutional status. The provision can operate at sub-degree, degree, or postgraduate level, through many different modes of attendance.

We in Wolverhampton, for instance, currently operate a BSc (sandwich) in agricultural technology and an HND

engineering department of a polytechnic wholly housed in satisfactory accommodation that was purpose-built and fully met present day needs."

On staffing generally the HMI comment: "Occasionally - overall staff student ratios have tended to hide the fact that departments cannot provide adequate cover for all parts of the course."

It adds: "The burden of non-teaching, routine administrative duties - admission arrangements, course supervision, year and pastoral tutorials, collection and collation of statistical data, counselling of students - makes great demands upon the individual tutor's time."

It also says: "A considerable programme of in-service training will be needed if the polytechnics and colleges are to avoid the beginnings of academic stagnation and the loss of contact with current industrial practice. Observed reductions in the use of part-time staff will also exacerbate this trend."

Realization of this may help to explain some of the recent correspondence in *The THES* re architectural research and its value.

Your report of September 23 referred to an RIBA/ARCUK keynote paper by Professor John Tam, who was also a member of the UGC. What he has to say about architectural research confirms the opinions expressed by correspondents in recent weeks: "Unfortunately, the research base for architecture has not yet been adequately substantiated... there is still uncertainty about the nature and value of architectural research... There should be an emphasis upon that research which benefits the practice of architecture and leads to better building. A concerted effort will be needed to disseminate the findings of such research throughout the profession. Research and development linked to good quality practice is important for the future of architecture." (*RIBA*, September 1983, p. 50).

These conclusions stem from the fact that despite 15 years or more of research, activity in schools of architecture it is not possible to identify one piece of research which has

Yours faithfully,
CHARLES THORNTON,
53 Redcliffe Gardens,
London SW7.

Merger decision

Sir, - The merger of Bedford and Royal Holloway Colleges may clearly be an economic necessity. However, the disposal of the Regent's Park site to raise funds for development at Bgham is a scandalous decision. Its location as an educational establishment, based in a beautiful Royal park and yet minutes from the cultural and social centre of London was unique.

Those involved must surely have realized the stupidity of losing such a prime educational site. Its impending sale will, I am sure, be mourned by many in the years to come.

Yours sincerely,
C. HUNTON,
Hughes Hall, Cambridge University.

Letters for publication should arrive by Tuesday morning. They should be as short as possible and written on one side of the paper. The editor reserves the right to edit letters for clarity and brevity.

Palestinian protests

Sir, - As college lecturers recently returned from a visit to Israel and the occupied territories of the West Bank and Gaza, we feel obliged to draw your readers' attention to the plight of the Palestinian universities and higher educational institutions. The massacre at Hebron university, an act apparently perpetrated by Israeli settlers, in which three died and over 30 were wounded was well publicized in Britain. However, fewer people will be aware that the Israeli authorities responded to this terrorist act by imposing a curfew upon the Arab population of Hebron. Although the killers are believed to have come from the Israeli settlement at Kiryat Arba, no curfew was imposed there. Needless to say, as with other acts of violence against Palestinians, no arrests have been made by the Israeli authorities.

Protests by students at Bir Zeit University near Ramallah which followed the killings provided the pretext for further harassment. The day after the demonstration, in which two students received gunshot wounds from the Israeli military, 26 students were arrested and charged with stone throwing. Sentences imposed by the military courts ranged from 18 months to two years imprisonment. In each case, these convictions were based on the unsupported testimony of individual soldiers. Israelis charged with similar offences during our visit were punished by small fines.

These events emphasized the brutal Israeli repression. More insidiously, the Arab universities are not allowed to purchase many periodicals published in Arabic. Many books on the Middle East, freely available in the Israeli universities, are banned by the censors in Palestinian institutions. A recent regulation requiring foreign teaching staff to sign a declaration of opposition to the Palestinian Liberation Organization before a work permit is granted has effectively blocked all new overseas appointments. To local teaching staff, the threat of arrest, imprisonment, or even deportation (as was the fate of the president of Bir Zeit University) is ever present.

We therefore salute the courage of our Palestinian colleagues who persevere in such adverse conditions. As members of the National Association of Teachers in Further and Higher Education we call upon the teachers' trade unions and the National Union of Students to campaign against Israeli harassment of Palestinian higher education. We urge all educators who have contacts with Israeli academic institutions to demand that they pressurize their government to end this repression. Surely academic links with Israeli institutions must be at risk if this disgraceful situation is allowed to continue.

Yours faithfully,
JOHN CONNELLY,
Ealing College of Higher Education, London.
DUNCAN MACPHERSON, St. Mary's College, Strawberry Hill, Twickenham.
PETER SMITH, Kingston College of Further Education, Surrey.

Tall storey

Sir, - It is valuable to see a discussion of the Popper concept of falsifiability in your columns (*THES*, September 23). Colin Radford asks "what cogent reasons can Popper provide for his claim that we should prefer highly corroborated theories?" On the assumption that scientific theories are intended to be useful as a guide to future action, I illustrate this concept to my students by an argument which may be paraphrased as follows:

"Past experiments have shown that persons who fall from 100 storey buildings without the benefit of artificial means of reducing their speed of descent find the experience fatal. This does not prove that if you fall (or jump) from a 100 storey building, you will die. However, until you find evidence to the contrary, it is a good working hypothesis to assume that you will."

If Colin Radford finds this approach too Johnsonian, perhaps he could write again after he has tested the hypothesis.

Yours faithfully,
Dr. A. J. POINON,
Department of physics